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North Carolina State
Board of Health

Thirty-Eighth Biennial Report
OF THE
NORTH CAROLINA
STATE BOARD OF HEALTH



July 1, 1958-June 30, 1960

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MEMBERS OF THE STATE BOARD OF HEALTH

Appointed by the Governor

MRS. J. E. LATTA

Appointed 1953

Term expires 1961

LENOX D. BAKER, M. D.

Appointed 1956

Term expires 1961

Z. L. EDWARDS, D. D. S.

Appointed 1957

Term expires 1961

JASPER C. JACKSON, Ph. G.

Appointed 1959

Term expires 1963

BEN W. DAWSEY, D. V. M.

Appointed 1959

Term expires 1963

Elected by the Medical Society of the State of North Carolina

JOHN R. BENDER, M. D., *Vice-President*

Elected 1949

Term expires 1961

CHARLES R. BUGG, M. D., *President*

Elected 1957

Term expires 1961

ROGER W. MORRISON, M. D.

Elected 1957

Term expires 1963

*EARL W. BRIAN, M. D.

Elected 1958

Term expires 1963

EXECUTIVE COMMITTEE

CHARLES R. BUGG, M. D., *President*

JOHN R. BENDER, M. D., *Vice-President*

Z. L. EDWARDS, D. D. S.

J. W. R. NORTON, M. D., *Secretary*

EXECUTIVE STAFF AS OF JUNE 30, 1960

J. W. R. NORTON, M.D., M.P.H., *Secretary and State Health Director*
(Term expires June 30, 1963)

**_____, *Assistant State Health Director*
(Concurrent with the State Health Director)

J. M. JARRETT, B.S., *Director, Sanitary Engineering Division*

FRED T. FOARD, M.D., *Director, Epidemiology Division*

ROBERT D. HIGGINS, M.D., M.P.H., *Director, Local Health Division*

***E. A. PEARSON, JR., D.D.S., M.P.H., *Director, Oral Hygiene Division*

LYNN G. MADDRY, Ph.D., M.S.P.H., *Acting Director, Laboratory Division*

****_____, *Director, Personal Health Division*

CHARLES L. HARPER, M.S.P.H., *Director, Administrative Services*

*Dr. Earl W. Brian—deceased August 1, 1960.

...Dr. John H. Hamilton served until his retirement, April 30, 1960.

...Dr. Ernest A. Branch was Director until his death, December 3, 1958.

...Dr. A. H. Elliot was Director until his retirement, June 30, 1959.

STATE BOARD OF HEALTH

5 members appointed by Governor (G) — 4 members elected by State Medical Society (S) — 4 year terms
(Year given indicates expiration of present term)

BOARD MEMBERS

JOHN R. BENDER, M.D., (S), Vice-Pres., 1961	CHARLES R. BUGG, M.D., (S) President, 1961, Raleigh
Z. L. EDWARDS, D.D.S., (G), 1961	ROGER W. MORRISON, M.D., (S), 1963
MRS. J. E. LATTA, (G), 1961	EARL W. BRIAN, M.D., (S), 1963
LENOX D. BAKER, M.D., (G), 1961	JASPER C. JACKSON, Ph. G., (G), 1963
	DURHAM
J. W. R. NORTON, M.D., STATE HEALTH DIRECTOR and SECRETARY-TREASURER	BEN W. DAWSON, D.V.M., (G), 1963
	M.D., ASSISTANT STATE HEALTH DIRECTOR
	Asheville
	Raleigh
	Lumberton
	Gastonia

EPIDEMIOLOGY DIVISION

FRED T. FOARD, M. D.
Accident Prevention (Home-Farm)
Communicable Disease Section
Occupational Health-Radiation Section
Public Health Statistics Section
Tuberculosis Section
Venereal Disease Section
Veterinary Public Health Section

ORAL HYGIENE DIVISION

E. A. PEARSON, D. D. S.

Consultation
Correction
Education
Lectures
Literature
Visual
Prevention
Research

ADMINISTRATIVE SERVICES

CHARLES L. HARPER, M.S.P.H.

Budgets
Central Files
Film Library
Personnel
Public Health Library
Public Relations
Supply and Service

LOCAL HEALTH DIVISION

ROBERT D. HIGGINS, M. D.

Administrative Section
Health Education Section
Mental Health Section
Public Health Section
School Health Section (School Health Coordinating Service—jointly with Ed. Dept.)

PERSONAL HEALTH DIVISION

_____, M. D.

Cancer-Heart-Chronic Disease Sections
Crippled Children Section
Maternal-Child Health Section
Nutrition Section

SANITARY ENGINEERING DIVISION

J. M. JARRETT, B. S.

Engineering Section
Public Water Supplies
Sewage Disposal
Radiation Monitoring
Insect-Rodent Control Section
Bedding
Entomology
Salt Marsh Mosquito Control
Sanitation Section
Environmental
Milk
Public Food and Lodging
Shellfish

LABORATORY DIVISION

LYNN G. MADDRY, Ph. D.

Acting Director

Approval of Laboratories
Biologies
Chemistry
Cultures
Cytology
Microscopy
Serology
Virology
Water

LOCAL HEALTH DIRECTORS IN NORTH CAROLINA

<i>Department</i>	<i>Health Director</i>	<i>Address</i>
Alamance	Dr. W. L. Norville	Burlington
Alleghany-Ashe- Watauga	Dr. James T. Googe	Boone
Anson	Dr. F. Y. Sorrell, PT	Wadesboro
Avery-Yancey-Mitchell		Burnsville
Beaufort	Dr. L. E. Kling	Washington
Bertie	Dr. W. P. Jordan, PT	Windsor
Bladen	Dr. A. F. Pumphrey, PT	Elizabethtown
Brunswick	Dr. C. B. Davis	Shallotte
Buncombe	Dr. H. W. Stevens	Asheville
Burke	Dr. G. F. Reeves	Morganton
Cabarrus	Dr. J. Roy Hege	Concord
Caldwell	Dr. William Happer	Lenoir
Carteret	Dr. Luther Fulcher, P.T.	Beaufort
Catawba-Lincoln- Alexander	Dr. William H. Bandy	Hickory
Cherokee-Clay-Graham	Dr. W. S. Cann	Murphy
Cleveland	Dr. Z. P. Mitchell	Shelby
Columbus	Dr. Floyd Johnson	Whiteville
Craven	Dr. E. D. Hardin	New Bern
Cumberland	Dr. M. T. Foster	Fayetteville
Currituck-Dare	Dr. W. W. Johnston	Currituck
Davidson	Dr. Dermont Lohr	Lexington
Davie-Yadkin	Dr. A. J. Holton	Mocksville
Duplin	Dr. John F. Powers	Kenansville
Durham	Dr. O. L. Ader	Durham
Edgecombe	Dr. W. A. Browne	Tarboro
Forsyth	Dr. Fred G. Pegg	Winston-Salem
Franklin	Dr. W. C. Perry	Louisburg
Gaston	Dr. B. M. Drake	Gastonia
Granville	Dr. W. P. Wheless	Oxford
Greene	Dr. Joseph L. Campbell	Snow Hill
Guilford	Dr. E. H. Ellinwood	Greensboro
Halifax	Dr. Robert F. Young	Halifax
Harnett	Dr. W. B. Hunter	Lillington
Haywood	Dr. Raymond K. Butler	Waynesville
Henderson	Dr. J. D. Lutz, P.T.	Hendersonville
Hertford-Gates	Dr. Quinton E. Cooke	Winton
Hoke	Dr. Clifton Davenport, P. T.	Raeford
Hyde	Dr. W. W. Johnston	Swan Quarter
Iredell	Dr. Ernest Ward	Statesville
Jackson-Macon-Swain		Sylva
Johnston		Smithfield
Jones	Dr. John Dillard Workman	Trenton

Lenoir	Dr. John Dillard Workman	Kinston
McDowell	Dr. W. F. E. Loftin	Marion
Madison	Dr. Margery J. Lord	Marshall
Martin	Dr. W. A. Browne	Williamston
Mecklenburg	Dr. Elizabeth C. Corkey	Charlotte
Montgomery	Dr. R. E. Fox	Troy
Moore	Dr. J. W. Willcox	Carthage
Nash	Dr. J. S. Chamblee	Nashville
New Hanover	Dr. C. B. Davis	Wilmington
Northampton	Dr. W. R. Parker	Jackson
Onslow	Dr. Eleanor H. Williams	Jacksonville
Orange-Person-Chatham- Lee-Caswell	Dr. O. David Garvin	Chapel Hill
Pamlico	Dr. L. E. Kling	Bayboro
Pasquotank-Perquimans Camden-Chowan	Dr. J. A. Johnson, P.T.	Elizabeth City
Pender	Dr. N. C. Wolfe, P.T.	Burgaw
Pitt	Dr. Georgia V. Mills	Greenville
Randolph	Dr. H. C. Whims	Asheboro
Richmond	Dr. Clem Ham	Rockingham
Robeson	Dr. E. R. Hardin	Lumberton
Rockingham	Dr. C. T. Mangum, P.T.	Spray
Rowan	Dr. C. W. Armstrong	Salisbury
Rutherford-Polk	Dr. Ann B. Lane	Rutherfordton
Sampson		Clinton
Seotland	Dr. Clem Ham	Laurinburg
Stanly	Dr. R. E. Fox	Albemarle
Stokes	Dr. J. S. Taylor, P.T.	Danbury
Surry	Dr. R. B. C. Franklin	Mount Airy
Transylvania	Dr. John R. Folger, P.T.	Brevard
Tyrrell-Washington	Dr. Claudius McGowan, P.T.	Plymouth
Union	Dr. Conway Anderson Bolt	Monroe
Vance	Dr. J. U. Weaver	Henderson
Wake	Dr. Isa C. Grant	Raleigh
Warren	Dr. W. B. Jones, Jr.	Warrenton
Wayne	Dr. S. B. McPheeters, P.T.	Goldsboro
Wilkes	Dr. A. J. Holton	Wilkesboro
Wilson	Dr. Joseph Campbell	Wilson
Charlotte, City of	Dr. Elizabeth C. Corkey	Charlotte
Rocky Mount, City of	Dr. J. S. Chamblee	Rocky Mount



NORTH CAROLINA
STATE BOARD OF HEALTH

RALEIGH

December 1, 1960

J. W. R. NORTON, M.D., M.P.H.
STATE HEALTH DIRECTOR
AND
SECRETARY-TREASURER

ASST. STATE HEALTH DIRECTOR

MEMBERS

CHARLES R. BUGG, M.D., PRES.	RALEIGH
JOHN R. BENDER, M.D., VICE-PRES.	WINSTON-SALEM
Z. L. EDWARDS, D.D.S.	WASHINGTON
MRS. J. E. LATTA	MILLSBORO, RT. 1
LENIX D. BAKER, M.D.	DURHAM
ROGER W. MORRISON, M.D.	ASHEVILLE
JASPER C. JACKSON, PH. G.	LUMBERTON
BEN W. DAWSEY, D.V.M.	GASTONIA
OSCAR S. GOODWIN, M.D.	APEX

The Honorable Luther H. Hodges
Governor of North Carolina
The State Capitol
Raleigh, North Carolina

Dear Governor Hodges:

Pursuant to the provisions of Chapter 130, Article 11, Paragraph 12, General Statutes of North Carolina, I herewith submit to you, and through you, to the General Assembly of North Carolina, the Biennial Report of the North Carolina State Board of Health for the fiscal years of July 1, 1958 - June 30, 1960.

Respectfully submitted,

J. W. R. Norton
J. W. R. Norton, M. D.,
Secretary and State Health Director

n/e

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REPORT OF THE SECRETARY-TREASURER AND STATE HEALTH DIRECTOR

July 1, 1958-June 30, 1960

**Abridged report of the activities of the State
Board of Health as recorded in the Minutes:**

July 17, 1958. The North Carolina State Board of Health met in regular quarterly session, Thursday, July 17, 1958, 1:30 p.m.-4:30 p.m., in the cafeteria of Rex Hospital, Raleigh. First, the Board members assembled in room 440, where Associate Justice Emery B. Denny, of the Supreme Court of North Carolina, administered the oath of office to Earl Winfrey Brian, M.D., who was elected by the Executive Council of the Medical Society of the State of North Carolina to fill the vacancy created by the death of Dr. G. Grady Dixon, whose term expires May, 1959.

The Board members then adjourned to a room in the cafeteria of the Hospital. The meeting was called to order by Vice-President, John R. Bender, M.D., and Dr. Z. L. Edwards delivered the invocation. All members of the Board were present.

On motion of Dr. Baker, seconded by Dr. Bugg, the minutes of the Board meeting held on May 7, 1958 at Asheville, were approved as circulated.

Secretary Norton introduced Mr. Ben Eaton, Jr., who joined the staff on April 28, 1958, as Director of Administrative Services. Mr. Eaton reported on the progress of the work on air-conditioning of the Health Building, stating that the installation work would begin on Monday, July 21, and that it should be completed by the latter part of September. He also reported on the progress of budget presentation before the Advisory Budget Commission.

Dr. Baker discussed briefly the decision of the Executive Council and House of Delegates of the Medical Society of the State of North Carolina to ask the 1959 General Assembly to make vaccination against poliomyelitis compulsory, and pointed out that a resolution was passed by the Board at its last meeting in support of such legislation. He suggested that the handling of this action be left to Dr. Norton who reported that the NCPHA and North Carolina Congress of PTA had also passed resolutions favoring support of the Medical Society in its request. On motion of Dr. Bugg, seconded by Mr. Lutz, the Board went on record unanimously as approving compulsory vaccination legislation.

Dr. Norton discussed an article which appeared in the June, 1958, JAMA relative to chemical tests for intoxication. He stated that these tests seemed to have reached a point where they are dependable and that during the last Legislature the Motor Vehicle Department recommended this as one means of cutting down on the crippings and killings on the highways. After discussion, Dr. Baker moved that the Board approve the passage of a law in this State somewhat similar to that in New York to require persons arrested for drunken driving to submit to a chemical test. Motion seconded by Dr. Morrison, and unanimously carried.

Dr. John H. Hamilton, Chairman of a Committee composed of Dr. Z. L. Edwards, Dr. Lenox D. Baker and Dr. J. W. R. Norton, submitted a draft of a resolution of respect for Dr. G. Grady Dixon. Dr. Baker moved the memorial resolution be adopted, and that a copy be recorded in the minutes of this Board, that copies be sent to Mrs. Dixon and the two sons, and to the North Carolina Medical Journal. Motion seconded by Mrs. Latta and carried unanimously. Dr. Hamilton was thanked for preparing the well-written resolution in memoriam and all stood for a moment in silent memory of their departed friend. The memorial resolution reads as follows:

"On May 7, 1958, while returning to his home in Ayden from Asheville, where earlier in the day he had presided over the Conjoint Session of the State Board of Health and the Medical Society of the State of North Carolina and over a regular meeting of the North Carolina State Board of Health, Dr. George Grady Dixon died in Hickory, North Carolina.

"George Grady Dixon was born near the Gardner's Cross Roads section of Pitt County on April 29, 1890. His parents were John Mc Dixon and Irene Buck Dixon. His education began in the graded schools in the community of his birth. He attended Winterville High School, from which he graduated in 1908. From 1911 to 1915 he attended the Medical College of Virginia, in Richmond, graduating in 1915. He served his internship at the Grace Hospital, Detroit, Michigan. Following this he started the practice of medicine with the late Dr. W. Harvey Dixon in Ayden, North Carolina. The people of this community began to call him "Dr. Grady" to distinguish him from the other Dr. Dixon. During World War I Dr. Grady Dixon enlisted in the Army in 1917 as a lieutenant and was honorably discharged in 1919 as a captain. His association with Dr. Harvey Dixon was severed in 1925, when Dr. Harvey Dixon became head of the Caswell Training School at Kinston. Even after Dr. Harvey was no longer in the office the patients, as well as most of the people in that part of Pitt County, spoke of "Dr. Grady" not for distinguishing purposes but as a term of affection.

"Dr. Dixon was married to Miss Julia Elliott of Hertford. They have two sons, Grady, Jr., who is a student at North Carolina State College and John Elliott, who graduated in medicine at Duke University early in June.

"Since 1931 Dr. Dixon served as a member of the State Board of Health. He was selected by the Executive Committee of the North Carolina Medical Society to succeed Dr. James M. Parrott, who resigned to become State Health Officer in July of that year. In May, 1932, he was re-elected to that position and has been re-elected since then. In 1949 he was elected President of the State Board of Health, an office which he held at the time of his death.

"Many times the medical profession has called upon Dr. Dixon for service and has honored him on numerous occasions. One of the honors most prized by him came in March, 1956, when he received from the School of Medicine at the University of North Carolina the Distinguished Service Award for 'significant achievement and meritorious service in medicine.'

"In addition to his interest in the broad field of medicine, he felt a deep sense of duty to other activities in his community. He was instrumental in the organization of the Rotary Club 36 years ago. He was the first president of the club. He was a devoted church member, an active member of the Methodist Church, an assistant teacher of the Men's Bible Class for many years and a member of the Board of Trustees. He was active in the American Legion, being Commander of Pitt County Post in 1921 and 1922. He was president of the First National Bank in Ayden during the trying years of the early 30's and until 1937.

"Because of his faithful service to his community, to his profession, to the cause of public health and to the well-being of the State of North Carolina, the North Carolina State Board of Health wishes to express its appreciation of the life that he lived and the high service which he rendered to his native State.

"THEREFORE, be it Resolved, That a copy of this expression of appreciation be published in the North Carolina Medical Journal; The Health Bulletin; a copy placed in the minutes of the State Board of Health, and that a copy be sent to Mrs. Dixon and his sons.

John H. Hamilton, M.D., Chairman
Lenox D. Baker, M.D.
Z. L. Edwards, D.D.S.
J. W. R. Norton, M.D."

Secretary Norton read and discussed a letter and resolution received from the State Association of County Commissioners, whereby this Association offered at its June meeting a resolution of support and aid in seeking an additional appropriation by the State for aid to local health departments. Dr. Baker moved that Dr. Norton write a letter to the proper official of the Association of County Commissioners expressing appreciation for its interest in and support of an increased State appropriation and that the Board solicits and will appreciate help in getting the increased State aid to local health departments. Motion seconded by Dr. Edwards and carried. Also, the Secretary-Treasurer of the Association, Mr. Alex McMahon questioned Secretary Norton regarding the possibility of using some trained business administrators to serve as local health directors. The Association was informed that it was the general feeling of the Board, through the years, that so many duties of a local health director involved medical professional responsibility rather than business administration, it is considered better to have a physician trained in public health as a local health director.

Mr. Ben Eaton was called on to report on comparison of North Carolina State aid to local health departments with those of neighboring states. He discussed the comparative financial support by various states in this region to public health, particularly to the local health departments. It was pointed out that each state approaches the problem of administration and cost on a somewhat different basis—some are highly centralized, some are in between, and others, such as North Carolina, operate within the framework of extensive local autonomy and strong financial contributions by the counties. This local contribution is considerably above most of the states in this region and above the national average while Virginia and a few other states make a larger state appropriation for local health services.

Looming large in the fiscal picture is that the State of North Carolina has been committed, since the early 30's, to the operation of a nine-months school plus the cost of schools of higher learning and for highways since the early 20's. With steadily mounting expenditures through the years for education and highways requiring a large proportion of the tax dollar, a relatively small percentage has been appropriated for state health programs and for contributions by the State to local health departments. Although the State support to local health departments is substantially below the average of many states, it would appear necessary that this strong financial support by the County Commissioners should continue, if standards are to be maintained and be improved until additional sources of revenue can be provided by the State.

As a matter of information, Dr. Norton discussed retirement of public health workers. He stated that at meeting of the Governor's Committee on

Aging, of which he is Vice-Chairman, it was requested by Mr. Nathan Yelton that each agency study the retirement regulations. He briefly reviewed the present regulations under which we operate of no physical examination required and no compulsory retirement age. We have only the one supervisor's recommendation at age 65 and after age 70 the recommendation at two year intervals. He pointed out the variations and modifications now used by different agencies. The State Board of Public Welfare requires an annual physical examination and recommendation by the supervisor for continued employment after age 65 and compulsory retirement at age 70. He also stated that the subject might well be brought up for further consideration by the Board for possible amendments and of course it may be considered by the 1959 General Assembly. No action taken.

Secretary Norton reported on the "Public Health Bulletin" which was recently prepared and distributed by the Institute of Government. This Bulletin has no official connection with the State Board of Health, other than to explain and help to bring about a better understanding of the revision of our public health laws. There is no conflict whatever with our regular monthly Health Bulletin. He stated further that this Bulletin would probably be issued for a limited time only, until it has served its purpose.

Dr. Z. L. Edwards reported on the critical illness of Dr. E. A. Branch, Director of the Oral Hygiene Division, and high tribute was paid to him and his work in the State by the Board. Dr. Edwards introduced the following resolution for the permanent record, and asked that a copy be sent to Mrs. Branch. Dr. Baker seconded the motion and it was unanimously carried, reading as follows:

"Having learned with deep regret of the illness of Dr. Ernest A. Branch, Director of the Oral Hygiene Division, therefore, be it

"RESOLVED: That this Board go on record as expressing its serious concern regarding the condition of this faithful public servant and the earnest hope for his speedy recovery."

There was some discussion relative to a policy for sending flowers in the name of Board members to deceased members. No action was taken but members were asked to send in their wishes and suggestions to Secretary Norton.

Mr. Charles R. Council, Chief of Public Health Statistics Section, reported on the problems in registration of delayed birth certificates. This was discussed briefly and no action taken. Dr. Norton was asked to investigate the matter further with the appropriate officials.

Mr. E. C. Hubbard, Director of the Water Pollution Control Division, presented a report covering an investigation of the needs of sewage works improvements due to inadequate sewage collection and disposal facilities in the Town of Troy, North Carolina, together with a resolution from the Town requesting that the State Board of Health issue an Order requiring the Town of Troy to proceed with the construction of sewerage system improvements for the protection of public health. Mr. Hubbard stated that these conditions had been thoroughly investigated and studied. And, in view of these findings he recommended that the State Board of Health Order the Town of Troy to make necessary sewer system and sewage dis-

posal improvements in order to provide adequate disposal facilities. On Motion of Mr. Lutz, seconded by Mrs. Latta, a RESOLUTION ORDERING THE TOWN OF TROY, NORTH CAROLINA TO PROCEED WITH THE NECESSARY SEWERAGE SYSTEM IMPROVEMENTS, was unanimously adopted.

Mr. J. M. Jarrett, Director of the Sanitary Engineering Division, discussed the insanitary conditions existing in the Town of Princeton, which have resulted from inadequate facilities for collection and disposal of sewage from the Town. He stated that a thorough investigation had been made by his department; and, for the protection of public health, it recommended that the Board adopt a resolution ordering the Town of Princeton to install adequate sewage collection system and treatment facilities. On motion of Dr. Morrison, seconded by Dr. Henderson, an ORDER FOR THE TOWN OF PRINCETON, NORTH CAROLINA TO MAKE NECESSARY SEWERAGE AND SEWAGE DISPOSAL IMPROVEMENTS, was unanimously adopted.

Mr. Jarrett also discussed a request from the City Manager of Monroe, North Carolina, to permit controlled recreational activities such as fishing, hunting and boating at the two municipal water supply lakes, which was described in detail in the ordinance adopted by the Board of City Commissioners. Mr. Jarrett stated that his division had investigated the situation, and that in their opinion, the properly controlled use of the lake for such purposes as stated would not cause any material hazard to the treated municipal water supply, and he recommended approval of the request by the City Manager. On motion of Mr. Lutz, seconded by Mrs. Latta, a RESOLUTION OF THE NORTH CAROLINA STATE BOARD OF HEALTH AUTHORIZING THE CITY OF MONROE, NORTH CAROLINA, TO PERMIT CONTROLLED FISHING, HUNTING AND BOATING IN LAKE LEE AND THE NEW CITY LAKE, was unanimously passed.

A resolution regarding the creation of a Carteret County Mosquito District was read and presented briefly by Mr. Jarrett. The creation of such districts was authorized by the 1957 General Assembly. The Carteret County application is the first received under this law. When deemed advisable and in the interest of public health, a County Board of Commissioners may adopt a resolution favoring such a district and present the petition to the State Board of Health. On motion of Dr. Bugg, seconded by Mr. Lutz, the RESOLUTION RE THE ADVISABILITY OF CREATING THE CARTERET COUNTY MOSQUITO CONTROL DISTRICT, was passed.

Mr. Jarrett then discussed proposed rules and regulations governing the disposal of sewage from any residence, place of business, or place of public assembly. He brought out that the change in the Public Health laws re-written and passed by the 1957 General Assembly required new rules and regulations in view of the fact that the old "Privy Law" was repealed and re-written in one new section. Items relating to "place of public assembly" to be covered under the new regulations and exemptions were discussed. The State Board of Health Bulletin #454 relating to the construction of Privies and Bulletin #519 relating to Septic Tanks were also discussed. It was pointed out that these bulletins had been corrected to conform to the new regulations. Upon motion of Dr. Baker, seconded by Mr. Lutz, the rules and regulations and the two bulletins referred to above, presented July 17, 1958, were approved, to become effective August 15, 1958.

Also, Mr. Jarrett presented proposed revised rules and regulations governing the sanitation of restaurants, hotels and motels. He stated that his Division had worked with the N. C. Association of Quality Restaurants, N. C. Hotel Association and the N. C. Motel Association in the revision of these regulations, and that committees of these three associations were in accord with what was being proposed with the exception of two items, and had requested that these two items be presented to the Board for discussion. They were: (1) Item #17 relating to milk and milk products in which they requested that reference to approval of bulk milk dispensers by local board of health milk ordinance be deleted; and, (2) Item #18 relative to medical health certificate changes. Mr. Jarrett discussed these requests in detail, and recommended that reference to local milk regulations be deleted from Item #17 of the restaurant regulations. Dr. Baker moved the adoption of the regulation provided that the phrase contained in #17 "where permitted by the regulations of the local board of health" be deleted; and that a committee be appointed by the President to further study health examinations and health certificates for employees of restaurants, hotels, and motels, and to bring recommendations to the Board for revision. Motion seconded by Dr. Edwards, and carried. Vice-President Bender appointed the following to serve on this committee working with Dr. Norton and Mr. Jarrett:—Dr. Morrison, Dr. Edwards and Mr. Lutz. These rules and regulations are to become effective October 1, 1958.

Dr. Baker discussed a proposed Sea Level Hospital addition for crippled children as information for the Board. No action by the Board at this time was considered necessary as adequate machinery has been set up previously for the handling of this matter.

As information, and by request of Dr. Walter Hunt of Raleigh, Dr. Norton discussed the use of tetanus toxoid instead of antitoxin in trauma cases. There was much discussion but it seemed to be the consensus of the group that this subject was not within the province of the State Board of Health to suggest specific handling of these cases, in each of which the attending physician uses his best judgment to fit the need.

At this point the meeting adjourned again to Room 440 in the hospital for the election of a President to fill Dr. Dixon's unexpired term. The following were elected:—President, Charles R. Bugg, M.D., and Member of the Executive Committee, Z. L. Edwards, D.D.S. Adjournment.

December 18, 1958. The regular quarterly meeting of the N. C. State Board of Health was held Thursday, December 18, 1958, 1:00 p.m. - 4:00 p.m., in the Board Room of the Cooper Memorial Health Building, President Charles R. Bugg, M.D., presiding.

The meeting was called to order by President Bugg, and an introduction of Division Directors and Assistants was made.

On motion duly made by Dr. Baker and seconded by Dr. Bender, minutes of the Board meeting held on July 17, 1958, were approved as circulated to the members of the Board by the Secretary.

Secretary Norton made a further report on the retirement plan of public health workers—reviewing the policy and regulations of the Highway Commission and that of the State Public Welfare Department as compared to the Board of Health. He pointed out the various methods used by different

agencies; for instance, the Welfare Department requires an annual physical examination after age 65 years and compulsory retirement at age 70. A Highway Commission employee is retired at age 65 unless his department supervisor requests that he be retained and this recommendation has to be approved by the Director. The case of each employee retained after age 65 is reviewed each year and a thorough physical examination is required. The cost of these examinations are borne by the Commission. There was a discussion, and Dr. Norton was asked if he had any recommendations to make. He stated none at the present except it might be well to consider working out a plan for re-imbursement for State Board of Health employees' annual physical examinations after age 65 just as the Highway Commission had adopted and an annual review and recommendation regarding retention after age 65 rather than the one five-year recommendation at 65 and each two years after age 70. No action taken.

In discussing the policy of sending flowers from the Board members to deceased members, or establishing a memorial fund in the name of the Board, it seemed to be the consensus that each member should make his, or her, contribution in any way preferred. Dr. Baker moved, seconded by Dr. Brian, that each member act according to his own wishes, and not as a unit. Motion carried.

Secretary Norton reviewed, and gave a brief report on the "A" and "B" Budgets of the Board for the biennium 1959-1961. The "A" Budget represents a continuation of existing functions and services. This has been tentatively approved by the Advisory Budget Commission. The "B" Budget represents requirements for expansion of activities, transfers from Federal to State funds, or increases in services, not provided in the "A" Budget, such as additional aid to local health departments, accident prevention, mental health centers, veterinary public health, etc. The Secretary pointed out that no definite action is indicated until the Advisory Budget Commission releases its report and recommendations early in February, 1959.

Dr. Robert D. Higgins, Director of the Division of Local Health, presented a proposed tentative allotment plan for the distribution of additional state funds for county health departments as requested in the "B" Budget. The present policy was explained by Dr. Higgins, and a discussion followed by the members. Upon motion of Dr. Baker, seconded by Dr. Edwards, the Board approved the formula recommended for increase in aid to counties according to the "B" Budget. Motion unanimously carried.

Dr. Wm. M. Peck, Chief of Chronic Diseases-Radiation Section, made a progress report on the Radiation Protection Study and Advisory Committee. He pointed out that the Committee has completed an extensive set of rules and regulations concerning the use of radioactive materials. These are ready—except for minor changes—to be presented to the Board for its consideration. On the legal advice of Mr. McGalliard the committee is also preparing a proposal for enabling legislation which should definitely be adequate to support these regulations. This is designed to give the State Board of Health a measure of authority over radiation similar to that it now exerts in the control of other environmental hazards. Dr. Baker made a motion that the report be accepted; Dr. Bender seconded the motion, and the motion was carried. The staff of the State Board of Health, together with health physicists from State College, have organized an emergency

team for providing assistance in event of a radiation accident in North Carolina. It is composed of health physicists, physicians, nurses and engineers who are now meeting at regular intervals to rehearse emergency procedures. The team will be transported by the Highway Patrol or by aircraft of the National Guard.

Dr. Norton pointed out that the Board might wish to nominate a successor to replace the late Dr. G. Grady Dixon as our representative on the N. C. Health Council. The group is made up of organizational representatives of agencies connected with public health. Dr. Baker moved that Dr. John R. Bender be elected to represent the Board on the N. C. Health Council. Motion seconded by Dr. Edwards, and unanimously carried.

Mr. J. M. Jarrett, Director of the Sanitary Engineering Division, presented a petition for the creation of a sanitary district in Cabarrus County, to be known as the South Concord Sanitary District. Mr. Jarrett stated that all documents and transactions had been examined by his office and were, in his opinion, in order and in compliance with the law, and he recommended that the State Board of Health act favorably on the creation of this sanitary district. The matter was discussed, and upon motion of Dr. Baker, seconded by Dr. Brian, the **RESOLUTION OF THE N. C. STATE BOARD OF HEALTH CREATING THE SOUTH CONCORD SANITARY DISTRICT IN CABARRUS COUNTY**, was carried.

Mr. Jarrett also presented a request for the extension of the boundary lines of the Rural Hall Sanitary District. He stated that the documents, as well as the various transactions relative to this matter, had been examined by his office and were in order, and he recommended favorable action by the Board. On motion of Dr. Baker, seconded by Dr. Brian, the **RESOLUTION OF THE N. C. STATE BOARD OF HEALTH EXTENDING THE BOUNDARY LINES IN THE RURAL HALL SANITARY DISTRICT IN FORSYTH COUNTY**, was passed.

Then, Mr. Jarrett presented a request for the issuance of an order to the Town of Asheboro to construct a new sewage treatment plant and sewer extensions. He pointed out that this request for an Order had come from the town; that all documents and pertinent information had been carefully reviewed and are in order, and he recommended that the Order for the town to install adequate sewerage system and suitable treatment facilities be adopted. It was moved by Dr. Baker, seconded by Dr. Brian that the **RESOLUTION BY THE NORTH CAROLINA STATE BOARD OF HEALTH ORDERING THE TOWN OF ASHEBORO TO MAKE NECESSARY SEWERAGE AND SEWAGE DISPOSAL IMPROVEMENTS**, be adopted. Motion carried.

Also, Mr. Jarrett presented a request for an Order for the Town of Huntersville to install a new sewage treatment plant and sewer extensions. He reported all documents and transactions had been examined by his office and were, in his opinion, in order and in compliance with the law, and he recommended favorable action by the Board. Dr. Baker moved, seconded by Dr. Brian, that the **RESOLUTION BY THE NORTH CAROLINA STATE BOARD OF HEALTH ORDERING THE TOWN OF HUNTERSVILLE TO MAKE NECESSARY SEWERAGE AND SEWAGE DISPOSAL IMPROVEMENTS**, be adopted. Motion carried.

President Bugg discussed chemical tests for alcohol in drivers. He stated that the Motor Vehicles Department in the past, had suggested and recommended to the General Assembly that a blood test for alcohol in the blood be authorized, that there are a number of states that have different kinds of laws at this time. He stated that it was his feeling that we have reached a point where this test is reliable and dependable enough so that it would be desirable to cut down on deaths and injuries on our highways by use of this requirement and that he felt if the Motor Vehicles Department again presents a proposal of this nature to the General Assembly it should have the backing and support of the State Board of Health. After discussion, Dr. Brian moved that the Board of Health, through Dr. Norton, notify the Motor Vehicles Department that the Board is interested in and supports any movement to reduce deaths and maiming of human beings by motor vehicles in North Carolina occurring on our highways. Motion seconded by Dr. Baker, and carried.

Dr. Z. L. Edwards asked that a discussion of the School Health Coordinating Unit be arranged for a special meeting since he feels this subject needs more time and thought than could be allotted at this meeting. Dr. Baker suggested that members of the Dental and Medical Societies' Advisory Committees on School Health and State Coordinating Service be invited. These proposals by Dr. Edwards and Dr. Baker were agreeable to all present.

Dr. Edwards read the following resolution for adoption by the North Carolina State Board of Health, in memory of Dr. Ernest A. Branch, who passed away December 3, 1958:

**"RESOLUTION ADOPTED BY THE NORTH CAROLINA STATE BOARD
OF HEALTH, DECEMBER 18, 1958, IN MEMORY OF
DR. ERNEST A. BRANCH**

'Whereas, death has removed from our midst a most illustrious Public Health worker of the nation in the person of Dr. Ernest A. Branch, who for twenty-nine years headed the dental health program of the North Carolina State Board of Health, and

'Whereas, his professional skill, his deep sense of human value and his love for his fellow beings, especially children, eminently fitted him to perform those services to which he had dedicated his life; now therefore, be it

'Resolved, by the State Board of Health, collectively and individually, that, while we regret the passing of this great and good man, we take special pride in the work he wrought and the secure foundation he laid for continuation of the program he established; and be it further

'Resolved, that we commend not only the work he did among our children, but also the great contribution he made in bringing our people from ignorance to enlightenment concerning the protection afforded through fluoridation of our public water supplies; and further, be it

'Resolved, that copies of this resolution be spread on the minutes of the Board, furnished the press, published in the Health Bulletin and given to the Executive Secretary of the North Carolina Dental Society and to the members of Dr. Branch's immediately family.'

Signed: Charles R. Bugg, M.D., President
J. W. R. Norton, M.D., Secretary"

Dr. Edwards moved the adoption of the resolution, seconded by Dr. Bender, and carried by all members standing in silent tribute.

Dr. Edwards then read the resolution in memory of Dr. Branch adopted by the Raleigh Dental Society, December 6, 1958, as follows:

**"RESOLUTION IN MEMORY OF DR. ERNEST A. BRANCH ADOPTED
BY THE RALEIGH DENTAL SOCIETY, DECEMBER, 6, 1958**

'Whereas, the Lord has called unto Himself our loved one, Dr. Ernest A. Branch, who gave his life for the welfare and happiness of the children of our State and Nation and who exemplified in his living the teachings of our Saviour when He said, 'Suffer the little children to come unto me, and forbid them not: for of such is the kingdom of God'; and

'Whereas, Dr. Branch, more than any other public health worker, knew our State, its people, and their needs and dedicated a life of service and devotion to the cause of better dental health for the citizens of North Carolina; and

'Whereas, Dr. Branch, recognizing with gratitude and appreciation the contributions of others and never seeking acclaim for himself, accepted the many honors bestowed upon him with humble and gracious thanks, not only for himself, but also for all who had had a part in his achievement; and

'Whereas, The dental profession of this State, collectively and individually, are the beneficiaries of his sincerity, wisdom, and zeal in promoting and protecting the highest professional and ethical standards, thus adding immeasurably to the prestige and stature of dentistry in North Carolina; therefore, be it

'Resolved, That while we, the members of the Raleigh Dental Society, mourn the passing of our loved one whose endearing personality, unusual gift of humorous expression, superior intellect, and sympathetic nature made him a dominant figure among his fellows, we will cherish the memory of Dr. Branch as a great leader, teacher, and counselor; as a good man; and as a dear friend; and be it further

'Resolved, That we extend to the members of Dr. Branch's family and to the State Health Department our heartfelt sympathy in the great loss that they have suffered through his death; and be it further

'Resolved, That copies of this resolution be entered in the minutes of the Raleigh Dental Society and be sent to the Director of the North Carolina State Board of Health, the North Carolina Dental Society, and the members of Dr. Branch's immediate family.'

Signed: Dr. James H. Edwards, President
Raleigh Dental Society"

Dr. Edwards moved approval of and concurrence with this resolution, seconded by Dr. Baker, and passed.

Dr. Baker then suggested that a picture of Dr. Branch be obtained, framed and appropriately displayed in the Cooper Memorial Health Building.

Dr. Norton briefly reviewed the proposed legislative changes to be considered by the 1959 General Assembly. These proposals have been circulated and contain information the Board should know about as the Legislature goes into session.

Also, Secretary Norton stated that many boards meet on pre-arranged dates, whereas the Board of Health meets at the call of the President, and he said he would like to know if the Board wished to set definite times to meet. It was the consensus that the present arrangement is all right and no change was made.

Mr. Jarrett reported briefly on air pollution control. He stated that there was no set state law on air pollution. At present, the Board of Health is carrying on a survey made possible by a grant from the Public Health Service,—attempting to get a report on conditions throughout the State by questionnaires and personal visits, and it is hoped that this report will be available about April. He also pointed out that this study should be of considerable interest and would probably indicate the type of problems we have in this State and might help to determine whether we need legislation on air pollution control.

Dr. Norton discussed briefly the limitation of state-federal funds to local departments with part-time health directors after a specified period. He stated that it was very difficult to employ qualified directors, and also that a part-time health director is not able to devote regular time to health work. No recommendation was made at this time due to lack of qualified directors except that the subject should be considered later.

Dr. Norton discussed the status of the position of Assistant State Health Director. The amount requested has been turned down (Salary grade 75—\$12,132 to \$14,232 with approval of Grade 67—\$10,104 to \$12,036) and he asked the Board for instructions as to appealing to the Personnel Council for approval of our request. Dr. Baker moved that the appeal be made. Motion duly seconded by Dr. Bender, and passed.

Mr. Jarrett was asked to give a brief report on the recommendation of the Philpott Committee (Committee on Reorganization of State Government dealing with the subject of water pollution). Mr. Jarrett gave a brief history of the creation of the Board of Water Commissioners by the 1955 General Assembly and also the activities of the Commission on Reorganization of State Government dealing with the overall picture of the State Water Resources. He said that the Philpott Committee report issued in December 1958 contained the recommendation that the State Stream Sanitation Committee be transferred to the new Department of Water Resources and that this new Department of Water Resources would be designated to act as the administrative agency of the Stream Sanitation Committee. This would also mean that the Division of Water Pollution Control established in the State Board of Health by Legislative Act of 1957 would also be transferred to the new Department of Water Resources.

Mr. Jarrett also advised that the first rough draft of the Bill has been prepared but that he has not had an opportunity to study it thoroughly. There were some questions raised, however, which need clarification as to the possible transfer of health functions from the State Board of Health to the new Department of Water Resources should such department be established. He plans to discuss this with representatives of the Institute of Government who are working on the preparation of this Bill for Mr. Philpott's Committee.

Mr. E. C. Hubbard, Director of the Water Pollution Control Division, submitted a resolution passed by the Board of Aldermen of the Town of China Grove requesting the North Carolina State Board of Health to issue an order directing that certain improvements be made to the sanitary sewer system of said Town, including the erection of a sewage treatment plant, so that the said Town of China Grove may issue bonds for such purpose which would result in exceeding the limitation of 8% of the last

assessed valuation as prescribed in the Municipal Finance Act. In the absence of such an order, the necessary bonds could not be issued. Studies conducted by the Division of Water Pollution Control show that the population has grown from 1,491 in 1950 to an estimated 1,700 at present. These people live in 546 residences and are served by 60 business establishments and three schools with an enrollment of 1,234 pupils. All are connected to a sewer system discharging to four overloaded primary sewage treatment plants which have resulted in conditions contravening established water quality standards in classified receiving streams and complaints. The Town in recognition of its responsibilities in these matters has caused plans and specifications to be prepared for corrective facilities which have been approved by the Division of Water Pollution Control and the Public Health Service for a Federal grant under Public Law 660 in the amount of \$90,019. However, the Town cannot proceed further in this matter until bonds can be issued. Mr. Hubbard, therefore, recommended that the Board act favorably upon the request for an order to provide the required facilities. Dr. Baker moved that a RESOLUTION ORDERING THE TOWN OF CHINA GROVE TO MAKE NECESSARY SEWAGE DISPOSAL IMPROVEMENTS, be adopted. Motion seconded by Dr. Bender, and carried.

Dr. Fred T. Foard, Director of the Epidemiology Division, presented the need for change in the General Statutes of North Carolina concerning rabies vaccination and occupational diseases.

1. To provide that the County Commissioners of each county of the State be permitted to set the fee to be paid for the vaccination of dogs against rabies. He explained that the present fee of \$1.00 per vaccination has, in the past, been adequate to support the present anti-rabies program by reason of the necessity for vaccinating dogs annually but with the recent use of a new vaccine which will necessitate vaccination only once in three years, the vaccination fee must be raised to provide for the employment of dog wardens and other expenses incident to the Rabies Control program. On motion of Dr. Baker, seconded by Dr. Bender, the Board voted to support the Association of County Commissioners in their movement to extend anti-rabies control by granting freedom to counties from the limitation to the \$1.00 fee. Motion carried.

2. (a) Dr. Foard advised the Board that legislation enacted in 1935 placed the responsibility for providing occupational health services under the State Industrial Commission but that these services must be performed by the State Board of Health. He pointed out that in 1935 and for several years thereafter an allotment of \$10,000 per annum was made by the Industrial Commission to the State Board of Health but this allotment has been discontinued. The law, however, has never been changed to make this service a direct responsibility of the State Board of Health rather than through the Industrial Commission. Dr. Foard recommended that the State Board of Health consider approval of legislation which would transfer occupational health services directly to the State Board of Health and to solicit similar approval for such legislation by the Industrial Commission.

2. (b) Dr. Foard stated to the Board that under the North Carolina law twenty-seven (27) diseases are mentioned as occupational diseases and suggested that for a broader coverage of occupational diseases or hazards

the State Board of Health give consideration to endorsement of a change in existing compensation laws to include all disabling conditions, the origins of which are traceable to industrial employment, so that they will become compensable. No action taken.

2. (c) Dr. Foard stated to the Board that to enable the Occupational Health Section of the State Board of Health to establish preventive measures in the control of occupational diseases or hazards it is necessary to know where, when and under what conditions these diseases or hazards are occurring. He further pointed out that in most industrial states all compensable diseases or accidents occurring in industry are routinely reported to the State Board of Health or other agency responsible for industrial preventive medical services. Dr. Foard recommended that the State Board of Health give consideration to the endorsement of legislation which would require routine reporting by the Industrial Commission to the State Board of Health of all diseases or conditions for which compensation claims are made, or in the event legislation is not sought, that an agreement be entered into between the State Board of Health and the Industrial Commission under which complete reporting will be routinely carried out. Upon motion of Dr. Baker, seconded by Dr. Brian, the Board voted to authorize Dr. Norton personally to notify the Chairman of the Industrial Commission that if and when the list of compensable diseases and hazards is extended the State Board of Health personnel will render any assistance it can. Motion carried.

Reporting for the Orthopedic Credentials Committee (consisting of the professors of orthopedic surgery at each of the medical schools, one representative of the N. C. Orthopedic Association and the head of the N. C. Orthopedic Hospital), Dr. Baker explained that in the past when an orthopedist wanted to get on the crippled children's program his application was referred to the Credentials Committee. This Committee saw that the applicant met such requirements as special training in orthopedic surgery and had passed the specialty board, but actually knew very little about the individual surgeon's ability. The Credentials Committee now proposes that one or more of its group observe applicants perform several operations in an effort to learn what kind of work the applicant does, what kind of judgment he uses and what kind of results he gets. Dr. Baker asked for and received the Board's approval for this observation and evaluation of an orthopedist before he is accepted on the crippled children's roster. (This paragraph amended by Board meeting held on January 18, 1959, Sir Walter Hotel, Raleigh)

Dr. Jacob Koomen, Jr., of the Communicable Disease Section, reported on a meeting of the *Committee to Study Plan A For State Employees Health Services*. He stated that the North Carolina Health Council appointed a Committee in 1955 to study a plan to supply certain preventive medical services to state employees. This matter was discussed before the Board in 1956. Recently the Committee consisting of Dr. J. W. R. Norton, Dr. Ellen Winston, Dr. William Richardson, Dr. Logan Robertson and Mr. James T. Barnes was reactivated for the purpose of re-exploring the possibility of preventive medical services for state employees. At a recent meeting of the Committee a plan was advanced to set up three units of four rooms each. The individual unit was to have a full-time nurse and a

private physician. Dr. Koomen reported on a meeting of the Committee held with Mr. Paul A. Johnston. Mr. James T. Barnes discussed the nature of the preventive services. Mr. Johnston suggested that a one room unit might be appropriate for a pilot study of the use of such services. Initially, first aid and medical screening would be expected of the unit; later pre-employment physical examinations and placement examinations might be envisioned as functions. Mr. Johnston indicated that he would discuss the plan with Governor Hodges. It should be emphasized that administration of such a unit would likely be under the Personnel Department and that the State Board of Health is not being asked to play any role in administration, medical or nursing support, supervision or guidance.

Dr. Bender mentioned to the Board that he thought it would be a good idea to have a Legislative Committee to study proposed laws and legislation and report to the members of the Board of Health. After discussion, the President ruled that the Executive Committee should serve as a Legislative Committee to study any outstanding health measures or proposed legislation and report to the Board, either pro or con.

On motion duly made and seconded, the meeting adjourned at 4:30 p.m., and designated the next Board meeting to be held Sunday, January 18, 1959, 10:30 a.m. to 3:30 p.m., Sir Walter Hotel, and inviting the members of the Dental and Medical Societies' Advisory Committees on School Health and State School Coordinating Service to meet jointly. Adjournment.

January 18, 1959. A joint meeting of the School of Health Committees of the Medical Society of the State of North Carolina and the North Carolina Dental Society was set for 10:30 a.m., Sunday, January 18, 1959, Sir Walter Hotel, Raleigh.

The President called the Board members present together, but since at that time there was not a quorum, the group was adjourned in order that the members present could as individuals attend the joint Committee meeting on School Health work.

At about 1:30 p.m. and since Dr. Earl Brian had arrived completing the quorum, a short Board session was held.

The minutes of the December 18, 1958 meeting were approved as circulated with the exception of a correction made by Dr. Lenox D. Baker regarding a report for the Orthopedic Credentials Committee as follows:

"The Credential Committee now proposes that the applicant shall:

1. Be certified by the American Board of Orthopedic Surgeons, Inc.
2. Have practiced orthopedic surgery in the State of North Carolina for a minimum of one year.
3. Have attended one or more of the regular State crippled children's clinics under the supervision of a qualified Clinic Director for at least one year, a minimum of twelve clinic visits including at least six attendances at one clinic.
4. Carry out a clinical review to the satisfaction of an Examining Board appointed by the State Board of Health or its agent and consisting of three qualified orthopedic surgeons from outside his community who will visit the applicant in his home town for a period of one or two days. The clinical review to consist of:
 - (a) The demonstrating of a group of pre-operative cases and post-operative results,

- (b) Of performing two to three operations the general nature of which must have been agreed upon previously by the Board,
 - (c) Presentation of operative notes of all cases for the past year, if asked for by the Board.
5. Agree to have the State Board of Health or its agents obtain, from whatever local persons or agencies they deem necessary, letters in regard to the applicant's moral character in all aspects of his professional relationships within his community."

The above motion for correction was made by Dr. Baker, seconded by Dr. Bender, and passed.

In view of the services that have been rendered by the State Health Director and in view of his expanding responsibilities and his value to the State Board of Health, the Board discussed the advisability of an increase in his salary to \$18,000 per year. Dr. Brian moved and Dr. Edwards seconded the motion that the President of the Board be requested to make for the Board a request to the Advisory Budget Commission that such a change in the salary of the State Health Director be made. Motion passed.

There was some discussion of the possible desirability of having a good physical checkup on State Board of Health employees annually beginning at age 65. Dr. Baker moved and Dr. Bender seconded a motion (1) that an annual physical checkup—not a complete clinical survey running into many dollars—be required of State Board of Health employees beginning at age 65 when, in the opinion of the State Health Director, this appeared desirable; (2) that a summary of such checkup be provided to the State Health Director, and (3) that the State Board of Health provide \$10.00 toward the cost of each such required physical checkup. Motion was passed.

The various proposals regarding the establishment of a Department of Water Resources were discussed and the State Health Director was instructed to keep the Board informed as this proposal of the Commission on Reorganization of State Government makes its way in the 1959 General Assembly.

A progress report was made and discussion followed on the work of the Board Committee to study and advise on radiation protection—Dr. R. J. Reeves, Chairman, and the Governor's Committee on Nuclear Energy, Mr. William D. Carmichael, Chairman. A proposed bill has been drawn up by the Office of the Attorney General and copies distributed to Board members. The State Health Director was instructed to also keep Board members informed on the progress of such proposed legislation so that hearings could be attended and the Board's views heard if this should become desirable.

Meeting adjourned at 2:00 p.m.

March 3, 1959. There was a special meeting of the North Carolina State Board of Health held Tuesday, March 3, 1959, 11:00 a.m. - 1:00 p.m., in the Board Room of the Cooper Memorial Health Building, President Charles R. Bugg, M.D., presiding.

The meeting was called to order by President Bugg. The minutes of the Board meeting held on January 18, 1959, were read by Secretary Norton, and on motion of Dr. Bender, seconded by Dr. Edwards, were adopted.

Secretary Norton announced that Dr. Baker was ill in Duke Hospital with pericarditis. The members expressed their regrets at his absence and

illness and a telegram was dispatched to Dr. Baker extending best wishes for a speedy and complete recovery.

President Bugg reported that a request had been made for a hearing before the Advisory Budget Commission relative to the salary of the State Health Director. He said he would be notified when the hearing can be held. Dr. Norton informed the Board that the Commission already had allowed the Head of the State Mental Hospitals to be raised to \$18,000 a year and that the unit hospital directors in the System had been raised to \$16,000.

Mr. J. M. Jarrett, Director of the Division of Sanitary Engineering, presented and discussed a request for the extension of the boundary lines of the Parkwood Sanitary District in Cabarrus County. He recommended favorable action by the Board on this request, stating that all documents and transactions had been carefully examined and found in order by his Division. On motion of Dr. Bender, seconded by Dr. Edwards, the **RESOLUTION EXTENDING THE BOUNDARY LINES OF THE PARKWOOD SANITARY DISTRICT IN CABARRUS COUNTY, NORTH CAROLINA**, was so ordered.

Mr. Jarrett also reported on the request for approval for the creation of the Meadow Greens Sanitary District, Rockingham County, North Carolina. He stated that the necessary procedures had been completed for this sanitary district, that the various documents and transactions had been carefully examined and approved by his Division, and he recommended favorable action by the Board. Dr. Brian moved that the Board give its approval of the **RESOLUTION CREATING THE MEADOW GREENS SANITARY DISTRICT, ROCKINGHAM COUNTY, NORTH CAROLINA**. Motion seconded by Mrs. Latta and unanimously carried.

Mr. E. C. Hubbard, Director of the Division of Water Pollution Control, presented a request for consideration by the Board filed by the Town of Weldon for an Order requiring it to improve its sewage collection system and construct a sewage treatment plant. He said the total cost would amount to approximately \$400,000. Mr. Hubbard recommended that the Board issue the Order required to permit the Town of Weldon to make the necessary sewerage improvement. Motion seconded by Dr. Edwards, and carried.

Dr. Norton brought to the Board's attention the desirability of defraying the expenses—transportation, per diem and hotel—such as allowed by the State, to Board members attending national public health meetings pertinent to their work. Dr. Brian pointed out that he thought this was a good move in that it might induce more Board members to attend and participate in such conferences as would be of interest to them and assist in a fuller understanding and carrying out their responsibilities in public health. On motion of Dr. Bender, seconded by Mrs. Latta, reimbursement of Board members attending national public health meetings was unanimously carried. Following this motion, Dr. Z. L. Edwards was appointed by President Bugg to attend the National Dental Health Conference to be held in Chicago, Ill., April 27-29, 1959, as the Board of Health's representative.

Mr. Ben Eaton, Jr., Director of the Division of Administrative Services, made a report on the recommendations of the Advisory Budget Commission concerning the State Board of Health's appropriation for the biennium 1959-'61. Members of the Board had before them copies of the detailed

budgets which were explained. The Board went on record as holding the opinion that the proposed budget would be insufficient to insure adequate and necessary health services. After discussion, and on motion of Dr. Brian, seconded by Dr. Edwards, the Board unanimously adopted a STATEMENT concerning the budget and the needs of public health in North Carolina.

Following Mr. Eaton's explanation and the discussion of the Advisory Budget Commission's recommendation for the State Board of Health for the biennium for the "A" and "B" Budgets, Dr. Norton discussed an appeal from the recommendation of the Advisory Budget Commission, and announced that the Board of Health would have its hearing before the Joint Appropriations Committee at 2:00 p.m., Tuesday, March 17, 1959, Room 513 of the Revenue Building, to discuss its budgetary needs. All members are invited to be present. It is planned that there will be special representation at the hearing consisting of President Bugg, Dr. John R. Bender, Dr. M. B. Bethel, Dr. Robert F. Young, representatives of the N. C. Association of County Commissioners, Mr. John A. McMahon and Mr. Ben Haigh, also Secretary Norton, each to speak from various angles of needs for State support of public health work.

Dr. Jacob Koomen, Jr., Assistant Director of the Division of Epidemiology, reviewed briefly the present status of poliomyelitis, poliomyelitis vaccine and the bill before the General Assembly requiring poliomyelitis vaccination of North Carolina children. He stated that in 1958 thirty-seven cases of paralytic poliomyelitis were reported in the State. Twenty-five or approximately two-thirds received no vaccine, two received 1 dose; six, 2 doses and four, 3 doses. Twenty-two of thirty-seven cases occurred in children less than five years of age. All "Federal" vaccine has been shipped to local health departments. The amount supplied was 3,435,975 cc.; National Foundation supplied 362,261 cc. (to October 10, 1955) making almost 3.8 million cc. of Salk vaccine available without cost to North Carolina. Of the 0-19 year age group, approximately 78 per cent have received 1 dose, 68 per cent 2 doses and 52 per cent three doses. Physicians in private practice administered an undetermined number of doses of vaccine.

The bill relating to compulsory poliomyelitis vaccination has been acted upon favorably by both Senate and House Health Committees. The Board of Health is among the sponsors of this legislation. The vaccination bill had previously been sent to the Appropriations Committee for review relative to making State funds available for purchase of vaccine. It was made known that the Governor appeared to be sympathetic to use Contingency and Emergency funds for this purpose. The great advantage of the latter approach is that funds could be immediately used for buying vaccine; if legislative appropriations were required funds would not become available until July 1, 1959.

Dr. Koomen reported that the bill removing restriction on a maximum charge of \$1.00 by County Boards of Commissioners for rabies immunization had been acted upon favorably. This bill is also sponsored by the Association of County Commissioners.

Mr. Jarrett reported that the Bill creating a Department of Water Resources had been introduced in the General Assembly by Senator Morgan of Cleveland and by three representatives in the House. He said copies of

the Bill were now being studied and that a public hearing would be held. Mr. Jarrett went on to say that there seemed to be some opposition especially from the Western part of the State and that industry was unhappy over the proposal that the Stream Sanitation Committee be not only transferred but abolished as of 1965. Mr. Jarrett said that: "The other comment that I think is in line is the transfer from the State Board of Health to another Department of health functions and responsibilities." He continued: "The important thing that I see here is by transferring our Division of Water Pollution Control, they are taking with that Division certain health functions, and as you take away functions you have to give to whomever takes those functions some responsibility of the State Board of Health. The thing that disturbs me as much as anything else is that it may be establishing a precedent of taking from the established recognized State health agency its responsibility for the protection of health and vesting this responsibility in another department. Also in the Bill as presented which establishes the new Department of Water Resources there is no representative of health on the proposed Board."

Mr. Jarrett was asked to get printed copies of the Bill from the Institute of Government and the statement explaining it and pass on to Board members. Dr. Bender asked how many members would be on the Board. Mr. Hubbard said there would be seven and Mr. Jarrett explained the proposed setup of the Board.

Dr. William M. Peck, Chief of Chronic Diseases and Radiation Section, spoke briefly on the proposed Bill for controlling radiation hazards. He said that he had several copies of the proposed Bill but it had not been introduced. He said the Board's Study-Advisory Committee recommends that the State Board of Health develop regulations which would encompass radiation protection standards. Dr. Bugg asked for suggestions as to what action the Board should take. It was agreed that radiologists should be assured of representation on the new Board to carry out radiation legislation. Dr. Norton is to prepare a rough draft of a letter to the Governor for editing and signature by President Bugg.

Secretary Norton reported on the desirability of participation by all counties in the Local Government Retirement System. He pointed out the many advantages which can be provided at relatively small local cost.

Dr. Norton also reported briefly on the status of the position of Assistant State Health Director. So far, two qualified physicians have declined for various reasons. The salary range is \$11,604-\$13,704. It was decided that a Board meeting should be called when a specific recommendation can be made so the members would have an opportunity to confer with the applicant proposed. Adjournment.

May 6, 1959. The North Carolina State Board of Health met in the Sundial Room of the George Vanderbilt Hotel in Asheville, Wednesday, May 6, at 8:30 a.m., Dr. Charles R. Bugg, President, presiding.

The meeting was called to order by President Bugg. The minutes of the Board meeting held on March 3, 1959, which had been circulated, were approved.

Upon motion of Dr. Brian, seconded by Mr. Lutz, Dr. J. W. R. Norton, State Health Director and Dr. John H. Hamilton, Assistant State Health

Director, were unanimously re-elected for a term of four years—1963. This Board action requires confirmation by Governor Hodges to become effective.

Dr. A. H. Elliot, Director of the Personal Health Division, made a report on tentative plans for the Regional Conference on Health of the School Age Child to be held in Chapel Hill, September 8-12, 1959.

Dr. Fred T. Foard, Director of the Division of Epidemiology, explained the provisions of the compulsory poliomyelitis vaccination bill, also the new schedule of administration and price of vaccine. All members of the Board agreed with a comment by Dr. Bugg that the people should be fully informed that State purchased vaccine is intended only for the indigent and medically indigent and that a directive to this effect should be prepared and sent to local health departments. Secretary Norton was instructed to prepare a rough draft of a letter to be sent to Local Health Directors with copies to Chairmen of Local Boards of Health and Chairmen of County Commissioners. The rough draft is to be sent to Board members for comment and the final draft is to be edited by Drs. Brian and Baker and signed by the President and Secretary.

Dr. Baker moved, Mr. Lutz seconded and the Board approved, charging cost of distribution to the State cost of polio vaccine for which reimbursement is made.

In the absence of Dr. R. D. Higgins, Director of the Local Health Division, who was slated to present the subject, the State Vision Testing Study supported by the North Carolina Optometric Society, was explained by Secretary Norton. The matter was referred to Drs. Baker and Bender to serve as a study committee with the Committee for the Blind and report back to the Board at a later meeting.

Mr. William McKimmon of the Sanitary Engineering Division, reported on the proposed Paw Creek Sanitary District in Mecklenburg County. He said all preliminary requirements had been complied with. On motion of Dr. Morrison, seconded by Dr. Bender, the Board approved creation of the District.

Mr. McKimmon then explained the proposed extension of the boundary lines of the Catawba Heights Sanitary District in Gaston County. On motion of Mr. Lutz, seconded by Dr. Brian, the extension was ordered.

Mr. McKimmon then presented data designed to clarify the extension of the boundary lines of the Haw River Sanitary District in Alamance County. On motion of Mr. Lutz, seconded by Dr. Baker, the extension was ordered as recommended.

The question of allocating funds to the Local Health Departments as an incentive for Local Government Retirement was next in order. Dr. Baker made a motion to the effect that when a Local Health Unit joins the Local Government Retirement System the State Board of Health participate in proportion, limited to \$1,000 a year per county. It was decided that the matter of allocating incentive funds for local retirement be held in abeyance until a conference would be held by Drs. Bugg, Brian and Norton with Mr. Nathan Yelton, Executive Secretary, Teachers and State Employees Retirement System, and considered at a subsequent special meeting to be called during this month.

Priorities for the "B" Budget were again approved as presented to the Advisory Budget Commission with these to be presented to Senator David J.

Rose of the Senate Health Committee and the Joint Appropriations Subcommittee at a breakfast meeting the following morning. Changes increasing requests over those prepared a year ago for salaries of the State Health Director and Assistant Director and the four medical Division Directors were approved on the basis of merit and that a change would necessitate paying new personnel more. Meantime, it has been found that recruitment is more difficult than anticipated a year ago.

The meeting then adjourned in order that members of the Board could attend the Conjoint Session of the Board and the Medical Society of the State of North Carolina which was slated to convene at 10:20 a.m., in the Asheville City Auditorium.

May 21, 1959. There was a special called meeting of the State Board of Health held Thursday, May 21, 1959, 2:00 p.m. - 4:30 p.m., in the Board Room of the Cooper Memorial Health Building, President Charles R. Bugg, M.D., presiding.

Associate Justice Emery B. Denny, of the Supreme Court of North Carolina, administered the Oath of Office to the following for four-year terms,—re-elected by the Medical Society of the State of North Carolina at its May, 1959 meeting in Asheville, North Carolina:

Earl W. Brian, M.D., Raleigh

Roger W. Morrison, M.D., Asheville

The meeting was called to order by President Bugg, and all members of the Board were present.

On motion of Dr. Baker, seconded by Mr. Lutz, the minutes of the May 6, 1959 meeting were approved as circulated with the following amendment:

He moved to amend the minutes of the May 6 meeting by adding after his motion for an incentive payment limited to \$1,000 a year per county the following: "proportion should be clarified to mean in proportion to what we are contributing to payment of the salaries of those concerned, and no more."

Dr. Norton introduced Mr. Nathan Yelton, Executive Secretary of the Teachers and State Employees Retirement System. Before calling on Mr. Yelton, he explained the problem. He said he was not concerned so much with people moving from county to county as with those who are leaving the State. One of the things that was discussed in Asheville, May 6, was some equitable method of adjusting the allocation formula so as to give recognition and provide incentive to counties to set up and maintain the Local Government Retirement System.

Mr. Yelton explained the setup of the different retirement systems and how the Local Government System in the counties would work. It would not have to include all county employees, he said. Public Health and Welfare workers have shown a lot of interest in a Local Government Retirement System, he pointed out. The State Employees' Retirement System, the State Teachers' Retirement System, and the Local Government Retirement System are all different systems, he explained.

Mr. Yelton answered several questions asked by members of the Board. After some discussion, Dr. Baker moved that the State Board of Health

approve participating in the allocation formula for local health departments in order to provide incentive for joining the Local Government Retirement System, not to exceed \$1,000 a year to any county. The motion was seconded by Mr. Lutz, and carried.

Dr. Brian moved that the Board express appreciation to Mr. Yelton for his kindness in bringing this information to the Board. Motion seconded by Mr. Lutz and carried.

The Board voted to strengthen its directive to Local Health Directors, with copies to Chairmen of Local Boards of Health and Chairmen of the County Commissioners, relative to State purchased poliomyelitis vaccine for the indigent and medically indigent. The directive originally was adopted at Asheville, May 6, but today's action pointed out, in specific language, that those not indigent are not entitled to free vaccine which is provided only for those unable to pay. The Board also strengthened its statement as to how a person can be classified as unable to pay. It was pointed out that if the parent states he is unable to pay, the Local Health Director ordinarily would accept such statement at its face value, unless the Director has personal knowledge or could easily obtain information leading him to believe that such free vaccination would not be in order.

Dr. Fred T. Foard, Director of the Division of Epidemiology, reported on the polio situation, stating that through May 20 of this year six cases of polio had been reported as compared to none on the same date in 1958. He said a copy of the Attorney General's ruling on distribution of vaccine with reference to use of State purchased polio vaccine had been sent to all Local Health Directors. Dr. Foard further stated that there was a rise in paralytic polio over the Nation in 1958 over 1957 and that according to this early trend it is probable that we are going to have more polio in 1959 than in 1958.

During Dr. Foard's appearance before the Board, he presented a letter from Dr. Fred R. Klenner, Reidsville, North Carolina, requesting Board approval for his use of live polio vaccine. Dr. Foard added that the use of live vaccine has not been approved by the National Institutes of Health. Dr. Brian moved that Dr. Norton, as State Health Director, write a tactful letter to Dr. Klenner declining his invitation to experiment with this vaccine at this time. Motion seconded by Dr. Morrison and Mrs. Latta, and unanimously carried.

Dr. Edwards cited the wording of a sentence in the minutes of the last meeting concerning a salary raise for four medical division directors which might indicate a lack of merit on the part of the three non-medical division directors. Dr. Bender suggested leaving out "four medical" and Dr. Morrison agreed. Dr. Bugg suggested a motion under new business in this meeting to omit those two words. Dr. Bender moved that the minutes of this meeting show that we have amended that statement to read "salaries of the State Health Director, Assistant State Health Director and the Division Directors." Dr. Henderson seconded, and the motion carried.

President Bugg read letters from Governor Hodges approving the Board's re-election of Dr. Norton as State Health Director and Dr. Hamilton as Assistant State Health Director,—four-year terms, expiring June 30, 1963.

Dr. Norton made a brief report on the status of the appropriations. A joint appropriations subcommittee of twenty-five has been appointed, in-

cluding Dr. D. J. Rose, Senator from Wayne County. Dr. Norton said he had had several conferences with Dr. Rose, who thought, in general, that he could go ahead and recommend some increases in salaries, an increase for Accident Prevention, an increase for the Laboratory, particularly for the early finding of cancer, occupational health and on food and lodging. He felt that the larger appropriations for local health departments could not get any support, all of which would amount to about \$175,000 for the two years. Representative Carl Venters, of Onslow, who is on the committee, recommended \$25,000 increase for mosquito control, and Representatives James G. Stikeleather of Buncombe, urged that the \$25,000 that the Asheville Orthopedic Hospital receives out of our \$90,000 for crippled children be increased another \$25,000 making another \$50,000, but they did not recommend that it be increased over the approximately \$175,000 but to be taken out of the \$175,000. Dr. Norton said Dr. Rose was also going to request an increase for veterinary public health but did not know if it would go through. Dr. Morrison suggested that the proposed increase for cytology be put in something else, such as veterinary public health. He explained that on April 9, 1959, the North Carolina Division of the American Cancer Society mailed to all physicians of the State a list of thirty (30) pathologists in 19 cities in North Carolina who were equipped to do cytology on all specimens submitted to them. Because of the widespread availability of this service in North Carolina, Dr. Morrison thought it unwise to increase the expenditure of taxpayer's money for cytology at the State Laboratory of Hygiene when public funds could probably be better utilized in other health department activities. There was no action taken on this. Dr. Norton said Dr. Rose considered early diagnosis of cancer of major importance and that he had received more letters requesting his support than for all other items—and that these letters were mainly from rural doctors. Adjournment.

July 16, 1959. The North Carolina State Board of Health met in regular quarterly session, Thursday, July 16, 1959, 10:00 a.m. - 1:30 p.m., in the Board Room of the Cooper Memorial Health Building,—President Charles R. Bugg, M.D., presiding.

The meeting was called to order by President Bugg. On motion of Mr. Lutz, seconded by Dr. Baker, the minutes of May 21, 1959 meeting were approved after an amendment by Dr. Morrison regarding cytology specimens as follows to be added just before the last two sentences of the last paragraph:

“Dr. Morrison explained that on April 9, 1959, the North Carolina Division of the American Cancer Society mailed to all physicians of the State a list of thirty (30) pathologists in nineteen (19) cities in North Carolina who were equipped to do cytology on all specimens submitted to them. Because of the widespread availability of this service in North Carolina, Dr. Morrison thought it unwise to increase the expenditure of taxpayer's money for cytology at the State Laboratory of Hygiene when public funds could probably be better utilized in other health department activities.”

Mr. J. M. Jarrett, Director of the Sanitary Engineering Division, presented a request for the creation of Riegelwood Sanitary District in Columbus County, North Carolina, for the purpose of providing an adequate

water supply. He pointed out that the various documents and transactions had been examined and approved by the Sanitary Engineering Division regarding the proposed sanitary district and had also been discussed with a representative of the Attorney General's office. Dr. Baker moved that the RESOLUTION OF THE BOARD OF HEALTH CREATING THE RIEGELWOOD SANITARY DISTRICT be approved. Motion seconded by Mr. Lutz, and carried.

Mr. Jarrett also presented and discussed, at length, the proposed changes in the Rules and Regulations Governing State Aid in Mosquito Control, a copy of which had previously been sent to each Board member for review and study prior to presentation to the Board. In the discussion, Dr. Baker suggested that the following amendment to the last paragraph "C", Zone III, page 6 be changed to read:

"If the present appropriation for aid to local governmental units engaged in mosquito control is increased or decreased by a subsequent General Assembly, the maximum allocations to local health departments in Zones II and III shall be increased or decreased in accordance with needs or lack of needs by the same percentage that the additional or smaller appropriations increase or decrease the existing appropriation."

After discussion, Dr. Baker moved that the RULES AND REGULATIONS GOVERNING STATE AID TO MOSQUITO CONTROL DISTRICTS, etc. be accepted as amended. Motion seconded by Dr. Edwards, and carried.

Dr. Robert D. Higgins, Director of the Local Health Division, presented a very informative and interesting report on the status of county Health Directors for the last two-year period, 1957-'59. He pointed out that at the present time, there are 73 local health departments, 52 full-time Health Directors, 13 part-time involving 17 counties and 8 vacancies involving 13 counties or a total of thirty (30) counties without full-time Health Directors.

Dr. Higgins also reported that much interest had been shown and progress made among local health departments in the Local Government Retirement System. Since July 1, 1959, the following counties have joined the Retirement System:—Hoke, Pamlico, Orange-Person-Chatham-Lee, Greene and Bladen, and these are in addition to the 44 counties involving 36 departments previously operating under it.

Dr. Fred T. Foard, Director of the Epidemiology Division, made a progress report on the current poliomyelitis situation in North Carolina. He stated that of a total of 34 cases of polio reported through July 14, 1959, 31 cases were paralytic. Only 4 cases of paralytic polio were reported through July 14, 1958. The increase in paralytic cases to-date, he said was 27 or 675.0 per cent over the same period last year. Of the 31 cases of paralytic polio so far reported this year 20 had had no vaccination, 2 had one inoculation, 3 had two inoculations, 4 had three inoculations, and for 2 the record is unknown. So far, there have been 3,708,521 inoculations given by local health departments since April 1955 through June 30, 1959.

For information to the Board, Dr. Foard made a detailed and interesting report on the staphylococcal disease outbreak in a Greensboro Day Nursery in which approximately 100 infants and children were lodged. The nursery was closed for the month of May and was completely renovated and re-admissions of children were taken only after careful physical examination

and culturing of applicants. No new cases have been reported from June 1 to the present time.

Mr. Ben Eaton, Jr., Director of Administrative Services, reported on the highlights of legislation pertaining to health measures and allied services passed by the 1959 General Assembly. He pointed out especially SB 5 which requires the vaccination of young children against poliomyelitis from two months to six years and to have received their first shot before being allowed to attend any public, private or parochial school, and stated that North Carolina was the pioneer state in this compulsory poliomyelitis vaccination law. The appropriation of \$216,000 from the Contingency and Emergency fund is particularly helpful.

Mr. Eaton also called special attention to SB 496 which in cases of self-inflicted injuries upon an inmate of the State Prison System authorizes the local health director, or if unavailable, the health director of an adjoining or nearby area to give or withhold consent for further treatment. Dr. Norton discussed the bill in detail, explaining the unreasonable responsibility placed on the local health directors. He said it was passed the last day of the session and that neither he nor any member of his staff was consulted. He discussed an exchange of letters between him and Attorney General Malcolm Seawell. Dr. Baker made a motion that Secretary Norton continue to work on this matter to the best of his ability as to just what responsibilities and rights are involved in the matter, and whether the bill is constitutional. Motion seconded by Dr. Bender, and unanimously carried.

Mr. Eaton reported briefly on the appropriations for the State Board of Health for the fiscal years 1959-1961 and pinpointed the slight increases. This information had previously been circulated, in detail, to the Board members.

Dr. Lenox D. Baker moved that the State Board of Health go on record as expressing appreciation to Dr. Samuel F. Ravenel of Greensboro, N. C. for his activities and helpfulness in promoting the passage of the compulsory poliomyelitis immunization law; also to Dr. D. J. Rose, Dr. Rachel D. Davis, the Association of County Commissioners, and any others who served the interest of the Board of Health during the recent General Assembly. Dr. Norton was requested to write letters of appreciation to those named and any others who were instrumental in securing the passage of helpful legislation. Motion seconded by Mr. Lutz, and carried unanimously.

Secretary Norton reported the following changes in personnel: Dr. A. H. Elliot, Director of Personal Health, retired, effective June 30; Dr. D. Frank Milam, formerly with the Board, had returned to work and is Chief of the Cancer and Heart Sections; Dr. Robert D. Coler, Chief of the Occupational Health Section, had resigned on account of ill health and that Dr. William L. Wilson, a very highly qualified person who has held a similar position in Texas is coming to the Board to fill the Occupational Health Section position. Dr. Norton also paid high tribute to Mr. Ben Eaton who has requested a 2-year leave of absence from the State for overseas duty, effective August 1. He has received an appointment from the Public Administration Service of Chicago, Ill. which is sponsored and financed by the International Cooperation Administration of the State Department and will perform technical assistance in the administrative field during this period.

Dr. Z. L. Edwards reported briefly on his trip to the 10th National Dental Health Conference held in Chicago, Ill. at the American Dental Association

headquarters on April 27-29, 1959. He stated that the conference was of great value to him and the seriousness which all members attending exhibited at this Conference was an indication of their desire to improve dental health education and service throughout the United States. Adjournment.

October 29, 1959. A quarterly meeting of the North Carolina State Board of Health was held Thursday, October 29, 1959, 1:00 p.m. - 4:00 p.m. in the Board Room of the Cooper Memorial Health Building,—President Charles R. Bugg, M.D., presiding. All members of the Board were present including the two new Board members appointed by Governor Hodges,—Mr. Jasper C. Jackson, Ph.G. of Lumberton and Dr. Ben W. Dawsey, veterinarian of Gastonia. Mr. Jackson and Dr. Dawsey took their Oaths of Office in the Hall of the House, Capitol Building, September 1, 1959, for four-year terms each.

The meeting was called to order by President Bugg. On motion of Dr. Bender, seconded by Dr. Edwards, minutes of the Board meeting held on July 16, 1959, were approved as circulated to Board members.

Dr. Jacob Koomen, Jr., Assistant Director of the Division of Epidemiology, was called on to give the present status of leprosy in North Carolina. In the first twenty-six (26) years of the reporting system there was no case of leprosy in North Carolina. Since 1944 there have been five cases, four soldiers and ex-soldiers, and one missionary. So far as we can determine, there has been no case of indigenous leprosy in this State. The 1944 regulations said, "Patients shall be isolated until all the lesions are healed or arrested." Since then a considerable amount of new knowledge has been accumulated. In 1951 the United States Public Health Service removed interstate quarantine. Now practically all states permit home visiting of Carville patients, eleven require only reporting of cases and one state does not require even that. Many of these states have leprosy patients under home treatment.

The problem at the moment is the return of a confirmed leprosy patient to the State. Dr. Koomen read the action taken by the Board in 1956 as follows:

"It was the consensus of the Board that no leprosy case, in an infectious stage, should be admitted to North Carolina, and it was moved that the N. C. State Board of Health disapprove of individuals under treatment in the Carville Leprosarium, infected with leprosy, returning to the State until they are certified by the proper authorities of the U. S. Public Health Service as being non-infectious." The point at issue is our present regulation, which perhaps is in need of some change or modification.

Dr. Bugg brought up the case in Surry County, in which Dr. D. A. McLaurin, a private physician, and Dr. R. B. C. Franklin, County Health Director, have a special interest. Dr. McLaurin and Dr. Franklin had been invited to present any matters they liked to the Board.

Dr. McLaurin said that the diagnosis of a case of leprosy came as something of a shock and brought about a considerable amount of reading and a feeling of guilt at sending him away from his family. Further reading

brought out the feeling that perhaps after a fair amount of treatment that it would be quite in order for the patient to return home. Then he came up against the State regulations. For five years he failed to diagnose the case and his colleagues failed to diagnose it. On Dr. McLaurin's return from the Air Force, the man came into his office and the change was striking. The change in his condition under treatment is truly remarkable. He has been home on visits on several occasions. He has been well accepted in the community, his family is most anxious to have him home, and he feels that he is able to accept his treatment. They find little reason to think that Surry County would object to his returning home. He asked the Board to change the regulation something in line with what is done in other states, such as California. He had already mailed a copy of a letter he had received from the U. S. Public Health Service. The patient could be trusted to carry out the prescribed treatment and he would be isolated.

Dr. Franklin said it was he who brought on the law as it stands now. After this case developed, he started looking through our public health laws of North Carolina and did not find much of a rule or regulation that would guide him in handling this case. He wrote Dr. Norton that he thought we needed a revision in the public health law to give him a little more guidance. In the law of 1956 he got a little more than he asked for in that the law conflicts with Carville recommendations. They say that they know the man is safe to come home.

Dr. Bugg remarked that this delay in accepting Carville approval by our objection could go on all his life.

On the other hand, Carville wants the man to come home and they do not think there is any danger. He is a good man, with a good family, very honorable and trustworthy, and the 1956 regulation might put him away for life. Dr. Franklin said he had no doubt that he would be accepted in Surry County. He is persistent in only one thing, to have the same privileges as he would have had he been a soldier of California or some of the other states.

Dr. Foard commented that the laws of California are much more broad and he thought this man is perfectly safe. The American Public Health Association comes out periodically with changes in regulations, they have been lenient all along, and he thinks they will be more lenient this year.

Dr. Morris moved that the Board rescind the 1956 leprosy regulation. Mr. Jackson seconded the motion, and it carried.

Dr. Koomen said that no cases of leprosy had occurred in the professional staff at Carville, one possible case in the non-professional staff.

Dr. Fred T. Foard, Director of the Division of Epidemiology, gave the Board members a written summary of polio vaccination. Against 62 cases last year at this time, with 26 paralytic and 4 deaths, there have been 250 cases, 210 paralytic, and 17 deaths this year, most of them among people not vaccinated. He feels that the polio situation this year has occurred principally because of negligence on the part of the public. This happens to be a high year and a lot of people have not been vaccinated.

Dr. Bugg called attention to the fact that physicians are not reporting cases that are not paralytic. They are doing more lab work now.

Dr. Koomen commented on the portion of the poliomyelitis immunization law which reads:—"an adequately immunizing dose as determined by the

North Carolina State Board of Health of a prophylactic agent against poliomyelitis . . ." The matter of "adequately immunizing dose" has raised some questions as to amount, spacing, need for booster inoculations, route of administration, etc. Dr. Koomen briefly discussed these items and noted that a number of changes had taken place since poliomyelitis immunization programs were begun.

Dr. Baker mentioned a meeting he attended in Pittsburgh at which it was brought out that adequate dosage depends on sufficiently large doses being given in the first series of doses to create adequate antibody response. If a child is tested and there is inadequate response then a fourth dose should be given. Dr. Salk feels that the first dose should be made adequately large, 2 cc., and then rather than trying to run titres, eventually a fourth dose of a pretty good size be given.

Secretary Norton pointed out that it is less than a year now before the Board must have its budget proposal for the next biennium, 1961-1963 prepared for presentation to the Advisory Budget Commission, and that it was not too early to begin thinking and considering budgets, new legislation or desirable amendments to present legislation.

Secretary Norton also reviewed a number of recent staff personnel changes in the Department as follows:

Dr. E. A. Pearson, Director, Oral Hygiene Division, replacing Dr. E. A. Branch, deceased.

Dr. Wm. L. Wilson, Chief, Occupational Health Section, has replaced Dr. Robert Coler, resigned because of ill health.

Dr. A. H. Elliot, Director of Personal Health Division, retired.

Mr. Ben Eaton, Jr., Director, Administrative Services, was granted a leave of absence from the State to accept a position with the Public Administration Service in Afghanistan.

Mr. Wm. H. Richardson, Publicity Specialist, retired and that E. S. Preston, LL.D. would assume the position of Public Relations Officer on December 1 and that Mr. Charles Harper of the Regional Office, Children's Bureau, Charlottesville, Va. would assume the duties of Director of Administrative Services, January, 1960.

Also, Dr. Norton announced that Dr. Wm. M. Peck, Chief, Chronic Diseases-Radiation Section, had been invited to accept the position of Director of Public Health on Guam, January 1, 1960, and would be terminating his services about December 31, 1959. Dr. Norton paid high tribute to Dr. Peck, stating that he had been a most useful member of the staff, had done a superior job and wished him success and happiness in his work. At this point, Dr. Bugg also stated that he wished Dr. Peck the best of luck and success.

President Bugg read a Resolution which had been adopted by the House of Delegates of the Medical Society of the State of North Carolina, May 4, 1959, in tribute to Dr. G. Grady Dixon. Dr. Baker moved that the Resolution be made a part of the records of the State Board of Health. Motion seconded by Dr. Edwards, and carried unanimously. Copy of Resolution follows:

"WHEREAS Dr. G. Grady Dixon was a long and useful member of the Medical Society of the State of North Carolina, exemplifying the finest

of personal qualities in manifesting a responsibility for public service to his patients, and

"WHEREAS he had lent distinction and service to the Medical Society of the State of North Carolina as a leader, as an officer and as a representative of the Society upon other organizational structures and programs, and

"WHEREAS he exemplified concern for the problems of medicine and loyalty to the professional organizations which implemented such concern of the medical profession, even to the last hours of his life during the course of the 1958 Annual Sessions of the Medical Society of the State of North Carolina, now

"THEREFORE BE IT RESOLVED that this House of Delegates record for posterity the high regard of his fellow physicians and organizational leaders in North Carolina medicine in profound appreciation for the contributions which he has made to the profession of medicine and to this Society, and

"BE IT FURTHER RESOLVED that a copy of this resolution be spread upon the proceedings of this Society and that a copy be sent to the surviving members of his family and for the records of the North Carolina State Board of Health upon which he served long and dutifully and finally as its President."

Dr. Norton reviewed briefly the very helpful cooperation of the North Carolina Association of County Commissioners to public health from the standpoint of State and local problems, budgets and legislation. He presented a letter from Mr. Carson Bain, President, offering the assistance of the Association to the extent of designating a liaison member or committee to work with the State Board of Health on problems of mutual concern, and that he would like to suggest, with the approval of the Board, that he be given authority to write the President of the Association that the Board of Health would appreciate and welcome their designation of a liaison committee to work with a liaison committee of the Board. On motion of Dr. Edwards, seconded by Dr. Dawsey, Secretary Norton was authorized to write and accept the assistance and cooperation of the North Carolina Association of County Commissioners by their appointment of a liaison representative to work with a State Board of Health liaison representative on problems of mutual concern. Motion carried.

Dr. Baker moved that President Bugg appoint a member of the Board to act as liaison representative from the State Board of Health to the North Carolina Association of County Commissioners. Motion seconded by Dr. Edwards, and carried. Whereupon, President Bugg designated Dr. John R. Bender to serve as liaison officer of the Board of Health with the Committee from the North Carolina Association of County Commissioners.

Mr. J. M. Jarrett, Director of the Division of Sanitary Engineering, presented a copy of revised Rules and Regulations Governing the Sanitation of Beauty Shops recommended by the North Carolina State Board of Cosmetic Arts. Regulations proposed by the N. C. State Board of Cosmetic Arts must be approved by the State Board of Health prior to their becoming effective. Mr. Jarrett read and discussed the regulations in detail and it was the consensus of the Board that there should be a slight modification or clarification in Item 8 in regard to the requirement that separate toilet facilities for each sex be provided in every establishment which might include

very small operators where possibly a man and wife would be the only employees. After discussion, Dr. Baker moved that the words "it is suggested that" be added. Motion seconded by Mr. Jackson, and passed.

Mr. Jarrett also presented and discussed proposed amendments to the rules and regulations governing the sanitation of restaurants, temporary restaurants, food stands, drink stands, and temporary food or drink stands for outdoor dining. He pointed out that he had received a number of requests from establishments desiring to operate such dining areas, and that under careful supervision of sanitary conditions, that there was no particular health hazards, and that the Division recommended the adoption of such an amendment to the present Regulations. On discussion, there were slight changes in wording, after which Dr. Baker moved that the AMENDMENT TO THE RULES AND REGULATIONS GOVERNING THE SANITATION OF RESTAURANTS, TEMPORARY RESTAURANTS, FOOD STANDS, DRINK STANDS, AND TEMPORARY FOOD AND DRINK STANDS, ESTABLISHING STANDARDS FOR OUTDOOR DINING, be approved. Motion seconded by Dr. Edwards, and unanimously carried.

Dr. E. A. Pearson, Director of the Division of Oral Hygiene, presented a request for a revision of the dental section of the "Contract with County, City and District Health Departments" to become effective July 1, 1960, and to read as follows:

"That in counties not having a full-time public health dentist funds are to be provided in their health department budgets to defray one-half of the expense of a Dental Health Program furnished through the Division of Oral Hygiene of the State Board of Health; that for each county with a population of not more than 10,000 funds shall be provided in the local health department budget for one-half of the expense for a minimum of six weeks' dental service; that for each county with a population of 10,000 to 25,000 funds shall be provided in the local health department budget for one-half of the expense for a minimum of ten weeks' dental service; that for each county with a population of 25,000 to 60,000 funds shall be provided in the local health department budget for one-half of the expense for a minimum of twenty weeks' dental service; and that for each county with a population of more than 60,000 funds shall be provided in the local health department budget for one-half of the expense for a minimum of thirty weeks' dental service.

"That, inasmuch as the Division of Oral Hygiene is defraying one-half of the expense of the dental program in each county and the dentists are employed for the entire year, it is understood and agreed that at least one-fourth of the allocated time in any county may be furnished while schools are not in session; and that, while the Division of Oral Hygiene cannot guarantee to deliver this service, it is impossible for the Division to employ dentists, when available, unless funds are budgeted by the counties to defray their half of the expense of the dental program."

In explaining the requested changes, Dr. Pearson stated that in the recent revisions of the contract, changes in wording have resulted in misunderstanding as to the unit on which the local dental health appropriation is based, that is, as to whether the county is the unit or the health department is the unit. Dr. Pearson pointed out that in former years the contracts with the counties stipulated that each county not having a full-time dentist was to appropriate funds for a dental program to be furnished through the Division of Oral Hygiene of the State Board of Health and stated that he believed this still to be the policy of the State Board of Health in regard

to dental programs in the counties of the State. He stated further that, with the growing tendency toward consolidation of county health departments into district health departments, the application of the formula to districts rather than to the counties in the districts would reduce the number of weeks of dental service to the point of great inadequacy in view of the dental needs manifested throughout the State.

Dr. Pearson called attention to the fact that in the proposed revision two steps would be added to the population-dental weeks scale: The first step in order that no hardship be imposed on the few counties having a small population; and the fourth step in order that the larger counties may provide for a more equitable amount of dental service in relation to their population.

President Bugg called on Dr. Edwards as dental member of the Board to express his opinion regarding the proposed changes. Dr. Edwards stated that Dr. Pearson had studied this matter carefully and had discussed it with him. Dr. Edwards stated that he was in favor of the recommended changes.

Dr. Norton expressed his approval of the changes as being a definite improvement and as providing for a better and fairer allocation of relatively limited services.

Dr. Edwards moved the adoption of the above dental revision. This motion was seconded by Mrs. Latta and was passed unanimously by the Board.

Dr. Wm. M. Peck, Chief of the Chronic Disease-Radiation Section, was called on to give a progress report on a preliminary draft of regulations for uses of radiation sources. Over a year ago the State Board of Health appointed a committee to develop regulations concerning radiation under chairmanship of Dr. Robert J. Reeves. Dr. Z. L. Edwards represented the State Board of Health. That Committee developed a rough draft of regulations but also made recommendation that these not be brought to the State Board of Health for its approval until two events had transpired: First, the passage of legislation establishing the right for the State Board of Health to make regulations. This took place last May and the State Board of Health now has undisputed right to adopt and enforce such regulations with certain important limitations. The other event—publication of the National Committee on Radiation Protections' revision of their rules concerning radiation—has not yet occurred but we do have a tentative draft of this document. Two limitations are attached by law to the State Board of Health regulations. One is that the State Board of Health cannot pass regulations more restrictive than AEC regulations. This, in practice, means that our regulations for AEC licensees must be identical with AEC regulations. The other stricture is that the regulations must be approved by the Governor. We have brought the proposed N. C. Regulations into conformity with these documents and are now circulating this second draft for criticism. It is rather long because of inclusion of AEC regulations and charts. Perhaps we could shorten it if this is considered desirable. Another point for policy decision is the detail that should be used in specifying requirements for x-ray machines. Our feeling is that to attempt to specify regulations for each type of equipment may be too restrictive for the sake of good medical practice. We believe that it is better public health practice to make these somewhat general and work out the details with medical societies

and individuals. This second draft has been sent to a number of people for criticism, including the President of the State Radiological Society, Dr. Reeves, the Attorney General's Office, the AEC, the Public Health Service, and the National Committee on Radiology. Dr. Peck invited suggestions.

Dr. Baker suggested that the second page, paragraph six, which reads: "If the ability of a qualified expert is questioned, the N. C. State Board of Health shall be the judge of his qualifications, etc.", should read "If the ability of a qualified expert is questioned, the N. C. State Board of Health, after consultation with the state licensing board concerned therewith, if any, shall be the judge of his qualifications."

Dr. Morrison discussed and recommended that the Board give more publicity regarding tetanus immunizations and that the public be made aware of its importance. He suggested booster immunizations every five years. A suggestion was made that more health education emphasis be given to this important matter. Adjournment.

March 17, 1960. The regular quarterly meeting of the North Carolina State Board of Health was held Thursday, March 17, 1960, 1:00 p.m.-4:00 p.m., in the Board Room of the Cooper Memorial Building,—President Charles R. Bugg, M.D., presiding.

On motion of Dr. Brian, seconded by Mr. Jackson, the minutes of the Board meeting held on October 29, 1959, were approved as circulated.

Secretary Norton made a progress report on the liaison with the North Carolina Association of County Commissioners who have expressed willingness on the part of the Association to cooperate with State and local health departments in mutual problems for State and Federal Budgets and legislation, but have not announced their representative to work with Dr. Bender of the Board.

For the Board's information, Dr. Norton made a progress report on the Local Government Retirement System. The following counties have been added since July 1, 1959:—Bladen, Duplin, Greene, Hoke, Orange-Person-Chatham-Lee, Pamlico and Rutherford-Polk, making a total of 43 departments, 58 counties and one city. All departments have Social Security. The local government retirement is similar to our State Retirement System.

As background information, Dr. E. A. Pearson, Jr., Director of the Division of Oral Hygiene, reviewed the action of the Board on October 29, 1959 in revising the section in the "Contract with County, City and District Health Departments" pertaining to dental programs in the counties. This revision again designates the county as the unit upon which the local appropriation for a dental program is to be based. It also establishes the minimum requirements for the number of weeks' dental service to be provided for, on a county basis, in the local health department budget in relation to the population:

Population	Number of dental weeks
Under 10,000	Six
10,00-25,000	Ten
25,000-60,000	Twenty
Over 60,000	Thirty

Dr. Pearson stated that this change in the contract necessitated some adjustments in the policy for administering the dental incentive which is included in the State Board of Health Aid to Counties Funds. Dr. Pearson traced the changes which have taken place in the allocation to the counties of the dental incentive.

He pointed out that inasmuch as:

1. The policy clearly states that in order to receive maximum State aid funds each health department must meet the requirements for a minimum standard health department;
2. One of the requirements is a dental program approved by the State Board of Health;
3. The revision pertaining to dental program, as passed by the Board October 29, 1959, defines an approved dental program;

there will, of necessity, have to be some withholding of State aid funds from any county failing to meet this standard for a minimum public health program.

Dr. Pearson reminded the Board that since the dental program is concerned with the school-age child, it would seem reasonable that any withholding come from that part of the State aid funds allocated to the counties on the basis of per pupil in average daily membership. He expressed the belief that a withholding based on child population would be fair and realistic, affecting each county in accordance with the differences in average daily membership. He suggested that four of the forty cents per pupil in average daily membership presently being allocated be withheld from a county failing to meet the minimum requirement for a dental program as set forth in the revised contract.

From examples, showing how the withholding of four cents per pupil in average daily membership would affect counties varying in population from 5,000 to 96,000, given by Mr. McCary and Mr. Reep of the Local Health Division, it seemed evident that the proposed deductions would be less than under the present policy in the smaller counties but greater in the larger counties.

Following some discussion, the Board went on record as approving the recommendation with the following provisions:

1. That the maximum deduction would not be more than \$750.00 in counties appropriating for a minimum of thirty weeks dental program;
2. \$500.00 in counties appropriating for a minimum of twenty weeks dental program;
3. \$250.00 in counties appropriating for a minimum of ten weeks dental program, and
4. \$150.00 in counties appropriating for a minimum of six weeks dental program.

That figures be compiled for all of the counties for Dr. Norton's and Dr. Pearson's consideration and that they be authorized to work out a formula which would be reasonable and uniformly applied on a State-wide basis. Dr. Baker moved, seconded by Dr. Edwards, that deductions be made by the formula recommended. Motion carried.

Mr. J. M. Jarrett, Director of the Sanitary Engineering Division, presented a request from the Cities of Thomasville and Lexington, North Carolina, to permit controlled fishing in the joint municipal water supply lake. He stated that the request had been thoroughly investigated, that proper

ordinances had been adopted, and he recommended that the Board consider the request with favor—that with proper sanitary facilities and control fishing would have no unfavorable effect on the quality of the water. On motion of Dr. Baker, seconded by Dr. Edwards, the request of the Cities of Thomasville and Lexington to permit controlled fishing in the municipal water supply lake, was passed.

Mr. Jarrett also discussed a request adopted by the Board of Commissioners of the Haw River Sanitary District regarding a correction in the description of the boundaries of the sanitary district as it now exists, including additional areas annexed thereto. He stated that the correction of the boundary lines of the Haw River Sanitary District had been discussed with the Assistant Attorney General and were found to be in order. Because it will be necessary for the State Board of Health to establish the present boundaries of the district before bonds can be issued for sanitary improvements to be made, he recommended that the Board consider with favor the establishment of the proposed new boundaries of the district, including the additional territory annexed thereto. Dr. Baker moved that the request from the Haw River Sanitary District, including the corrected boundaries for the additional territory to be annexed, be accepted by the Board. Motion seconded by Dr. Dawsey, and carried.

Also, Mr. Jarrett presented and discussed a resolution to dissolve the present Riegelwood Sanitary District in Columbus County. He stated that all documents, as well as customary transactions, had been followed in accordance with the requirements of the law for dissolving the Riegelwood Sanitary District, and in his opinion were in order. The reason for the dissolution was a discrepancy in the engineering description of the boundaries of the Riegelwood Sanitary District as originally created, and that the Bonding Attorneys had refused to allow the District to issue bonds for the installation of water and sewage facilities. Dr. Baker moved adoption of the resolution to dissolve the present Riegelwood Sanitary District in Columbus County. Motion seconded by Dr. Dawsey, and carried.

At this point, Mr. Jarrett presented and discussed a *new* resolution for the creation of the proposed Riegelwood Sanitary District, Columbus County, North Carolina. He stated that all documents and customary transactions had been examined by his office, and in their opinion, were in order. This Sanitary District is being recreated under correct boundaries so that the District can issue bonds for needed sanitary improvements. Dr. Baker moved, seconded by Dr. Dawsey, that the proposed resolution be adopted to recreate the Riegelwood Sanitary District in Columbus County under the correct boundaries. Motion carried.

Mr. Jarrett then discussed a resolution creating the Ocracoke Mosquito Control District. He pointed out the mosquito situation in Hyde County and Ocracoke and the urgent need of this request, and recommended favorable action by the Board on the request from the County Board of Commissioners. Dr. Baker moved, seconded by Mr. Jackson, that the resolution notifying the County Commissioners that the creation of the Ocracoke Mosquito Control District is advisable and approved. Motion carried.

Mr. Jarrett discussed a recent survey of private water supplies providing water for food and lodging places in the coastal area of the State, particularly on Ocracoke Island and the Dare Beaches. He pointed out the neces-

sity of requiring disinfection of water supplies used at food and lodging places where potential and actual contamination of ground water sources exist. After discussion, Dr. Baker moved that where the State Board of Health or local health department determines from reasonable bacteriological evidence that well water supplies serving public eating and lodging establishments is unsafe for drinking or other culinary uses that such places be notified to install and operate necessary equipment to effectively disinfect said water supply and that in places where satisfactory ground water supplies are not available that cistern water or bottled water from approved sources be served the public at such food or lodging places. Motion seconded by Mr. Jackson, and carried.

Mr. Jarrett next presented the need for a revision of Bulletin No. 519, Residential Sewage Disposal. He discussed the revision and changes brought about by a new method of drain field construction which should be incorporated in the rules and regulations regarding sewage disposal, and recommended the approval by the Board on the revision of this Bulletin. He also requested that Section III—B—Item I, of the rules and regulations adopted by the State Board of Health July 17, 1958 be amended by changing the date July 17, 1958 to March 17, 1960. Dr. Dawsey moved that Bulletin No. 519 be revised and that the proposed amended regulations be adopted as requested. Motion seconded by Dr. Baker, and carried.

Dr. John H. Hamilton, Assistant State Health Director, in presenting a proposed resolution on approved laboratories, requested the Board to approve a statement expressed as follows:

"It is the policy of the North Carolina State Board of Health that every laboratory (within the State) which is approved or retains approval for the making of serological tests for syphilis under the State Marriage Law shall be under the supervision of a physician licensed to practice medicine in North Carolina, who signs an agreement stating that he or she assumes responsibility for the ethical conduct of the laboratory."

Dr. Baker reported that Dr. Morrison had called him to say he is in favor of adopting this resolution. Dr. Baker moved that this resolution be adopted as a policy of the State Board of Health. Dr. Edwards seconded, and the motion was carried unanimously.

Dr. Hamilton announced that he is going to retire within the next two months, and this was simply for support of his successor. Dr. Dawsey said he thought Dr. Hamilton should be complimented for the job he has done in the past. Dr. Baker moved that the Chair appoint someone, preferably Dr. Norton, to draw up a resolution as an expression of appreciation and summarize the career of Dr. Hamilton to be released to the press at the time of his resignation. Dr. Dawsey seconded, and the motion was carried unanimously.

Mr. McCary of the Local Health Division referred to the list of health directors which had been distributed to the Board members. This is an up-to-date, revised list which gives, first, the part-time health directors now serving in the local health departments; second, the full-time positions filled; and third, the vacancies now in existence without any health director serving. To give a better understanding of this report, we have 53 single county units in the State, 18 district units, and 2 city departments, with a total of 73 departments serving the one hundred counties of the State. To date,

there are 13 part-time health directors. It is felt that at least eight of these local health departments: Bertie, Bladen, Franklin, Henderson, Pasquotank-Perquimans-Camden-Chowan, Rockingham, Tyrrell-Washington, and Union, should have full-time men. There are also three departments without any health director: Jackson-Macon-Swain, Sampson, and Warren. The total vacancies include part-time health directors and vacancies without any directors, which equals 13 part-time directors and 3 vacancies, or a total of 16 departments filled with part-time directors or without any directors. Mr. McCary asked the Board to study this list and determine if there is anything they can do as individuals to get these positions filled. Dr. Bender asked if salaries are adequate. Mr. McCary explained the different classes of health directors with their salary ranges, and stated that the salary ranges may be adequate in many respects, but the salaries for these health directors depend also upon the Local Board of Health and the County Commissioners. Dr. Norton commented that since January 1, vacancies have been filled in Avery-Yancey-Mitchell, Cherokee-Clay-Graham, Granville, Greene, and Wilson. Asked if the School of Public Health is usually filled, Dr. Norton replied that it is not and this is a regional school, health workers come from other states and are obligated in most instances to their home states.

As a preliminary to discussion of the proposed "A" Budget, Dr. Norton explained that the budget is divided into three parts, "A", "B", and "C". The "A" Budget is considered to be continuation of services theoretically at the same level to the people in the State. The "B" Budget consists of any new services or expansion of presently existing services. The "C" Budget is for capital improvements, such as new buildings or new equipment. Mr. Charles L. Harper, Director of Administrative Services, distributed budget information and explained the increases in each program by item of the tentative request for 1961-'63 biennium, showing a total increase of \$633,399. The actual appropriations for 1959-'61 were \$5,907,084, as opposed to tentative request of \$6,540,483 for 1961-'63 biennium. Certain items are applicable rather uniformly for all State employees, such as increments in salaries. The proposed increases are to provide the same volume of service, such as the increases in cost of hospitalization, clinics, in sanitation services required by law or replacement of equipment.

Dr. Norton thought it would be helpful, if the Board considers advisable, to be instructed to go ahead and present what we recognize as needs in order to carry on the program at the present level. Dr. Baker so moved, and Dr. Bender seconded the motion. The motion was carried unanimously.

Dr. Norton reported that Stream Sanitation had been transferred to the Department of Water Resources, and requests have been made and consideration given from time to time to changing sections or divisions. One section change, when Dr. Peck left, was that radiation was put in Occupational Health under Dr. W. L. Wilson and chronic diseases was put in with cancer and heart under Dr. D. F. Milam in the Personal Health Division. Nutrition Section has requested that they be made a division. The Nursing Section has requested repeatedly change from a section to a division. The Mental Health Section has requested change to a division. Dr. Norton recommended that mental health work, which is an enormous problem and a growing problem, be changed from section status to a division, headed by a psychiatrist, and supporting staff which they already have. Mr. Jackson

moved that the Board go along with Dr. Norton's suggestion that mental health be made a division with a psychiatrist as its head at a time determined by Dr. Norton. Dr. Dawsey seconded, and the motion carried unanimously.

Dr. Baker called attention to the importance of the polio vaccination program with the suggestion that any publicity that could be given to the program would be a great service especially to the children. This is the time of year to get vaccinations. Dr. Bugg announced that Dr. Sam Ravenel, Chairman of the State Medical Society Committee, has had a meeting of his committee, stimulated by the National Congress of Parents and Teachers. The Junior Woman's Clubs are going to undertake to run clinics at various places soon in order to get increased immunizations, assisted by lay groups with full cooperation of the medical profession. Each County Medical Society has such a committee. Dr. Norton reported that Dr. Ravenel had written Dr. Ellen Winston, urging that polio immunizations be stressed in day care nursery centers. He said he had written Dr. Winston that he was heartily in accord with Dr. Ravenel's request. Dr. Baker suggested that Dr. Norton write a letter to Dr. Winston showing interest of the Board, expressing hope of her positive interest in this problem and pointing out the importance of her cooperation.

Dr. Norton made a progress report on the poliomyelitis cases and the immunization program. There was much discussion and Dr. Baker suggested that he thought it might be a good idea to ask the Attorney General for a re-study and interpretation of the meaning of the word "admitted" used in the statute. In 1959, a total of 313 cases of polio were reported. Of that number, 270 were paralytic cases. Two cases, both paralytic, have been reported through March 16, 1960.

For information of the Board, Dr. Norton reported on a letter received from Dr. T. T. Jones of Durham, N. C., regarding alcoholism as a public health responsibility; alcoholism, a disease and alcoholism, a reportable disease. There was much discussion of the problem. The Board expressed appreciation to Dr. Jones' services as a physician, and particularly in the field of alcoholism. On motion of Dr. Baker, seconded by Dr. Edwards, Dr. Norton was instructed to reply to Dr. Jones' letter saying that the members felt that they are interested in pursuing the matter further and requesting suggestions on some way in which the Board can specifically be of help. Motion carried. Adjournment.

May 11, 1960. The annual meeting of the North Carolina State Board of Health was held, as required by law, on the second day of the annual meeting of the Medical Society of the State of North Carolina, in the Reynolds Coliseum, State College, the Director's Office, Room 105, Wednesday, May 11, 1960, 8:00 a.m. to 10:00 a.m., Dr. Charles R. Bugg, President, presiding.

The meeting was called to order by President Bugg. The reading of the minutes of March 17, 1960 was dispensed with because of their earlier distribution to members of the Board, and upon motion of Mr. Jackson, seconded by Dr. Morrison, were approved.

President Bugg read AN APPRECIATION AND A RESOLUTION for presentation to Dr. John H. Hamilton who retired as Director of the Labora-

tory of Hygiene, April 30, 1960. This resolution had been drafted and circulated to Board members earlier. A few minor changes were made in the wording. Dr. Roger W. Morrison moved the adoption of the resolution by the Board and also that it be prepared and framed—suitable for hanging—before presenting it to Dr. Hamilton, also that excerpts from the resolution be read by President Bugg at the Conjoint Session. Motion seconded by Dr. Dawsey, and unanimously carried. Copy of resolution follows:

**"AN APPRECIATION AND A RESOLUTION
NORTH CAROLINA STATE BOARD OF HEALTH**

May 11, 1960

"The North Carolina State Board of Health expresses its gratitude to Dr. John Homer Hamilton for the lifetime of service that he has rendered to the State of North Carolina through the medium of public health.

"Born in Ash Grove, Missouri, Dr. Hamilton moved with his family to Oklahoma while he was still a boy. He graduated from Oklahoma Agricultural and Mechanical College in 1910; taught science in Cherryvale, Kansas, 1910-1911; served as a chemist at the Institute of Animal Nutrition, Pennsylvania State College, 1911-1912; entered the Harvard Medical School in 1912, and graduated with a medical degree in 1916.

"After graduating from Harvard, he served as Associate Bacteriologist, Division of Laboratories and Research, New York State Department of Health, 1916-1918. He then became Associate Professor of Preventive Medicine and Assistant Director, State Public Health Laboratory, University of Iowa, 1918-1919.

"He served as Associate State Director, International Health Division, Rockefeller Foundation, 1919-1920.

"Dr. Hamilton came to North Carolina in 1920 as County Health Officer for New Hanover County, and in 1931 he came to the State Board of Health, where he became Director of the Division of County Health Work and Epidemiology.

"In 1933 he became the second Director of the North Carolina State Laboratory of Hygiene. He has been Assistant State Health Director since 1951 and editor of *The Health Bulletin* since 1942.

"Dr. Hamilton believes, with a great many other thoughtful people, that next to the ministry of religion the ministry of health constitutes the noblest calling in which man can engage. He has devoted a lifetime to the ministry of public health, and by example and encouragement has inspired young people to enter, to remain in and to give dedicated service to the profession. Thus, his influence is felt around the world.

"Concurrent with his work in public health, Dr. Hamilton has served as an officer in several professional associations and is affiliated with various medical, public health, and cultural organizations. He is a member of the Raleigh Academy of Medicine, Wake County Medical Society, Medical Society of the State of North Carolina, the American Medical Association, and the Southern Medical Association.

"In 1928 Dr. Hamilton served as president of the North Carolina Public Health Association and in 1944 took leadership in promoting the Laboratory Section of the Association. He is a Fellow of the American Public Health Association, Charter Member and Fellow of the American College of Preventive Medicine, and a Member of the Conference of State and Provincial Public Health Laboratory Directors. In 1946 he served as president of the North Carolina Academy of Public Health, and in 1954-1955, as president of the North Carolina Academy of Preventive Medicine.

"Dr. Hamilton is a member of the North Carolina Harvard Club, Executives Club of Raleigh, State Literary and Historical Association of North

Carolina and the North Carolina Society for the Preservation of Antiquities. He is a member of the White Memorial Presbyterian Church in Raleigh.

"In his contact with the staff and employees of the State Board of Health and with the people of North Carolina, Dr. Hamilton is first and foremost kind, understanding and considerate. His judgment and wisdom are keystones on which public health workers all over North Carolina have come to rely.

"His appearances before appropriating and governing bodies in support of health programs in North Carolina have been models of accuracy, pinpointing the salient facts of each bill, stressing economy of state money, the greatest service to the greatest number of citizens, and keeping public health in its proper perspective in relation to the total health program.

"The State Board of Health, recognizing his qualities of leadership, patience, wisdom, and kindness, is deeply grateful to Dr. Hamilton for his devoted service to public health and wishes for him many years of health and happiness."

Secretary Norton made a brief report on the compulsory polio vaccination law—which authorizes the State Board of Health to establish standards. Only three Salk shots have been recommended heretofore. The Attorney General's Office was asked for an opinion relative to the fourth compulsory poliomyelitis vaccination under the vaccination law as passed, and the reply was "it is my opinion that a county or local board of health has authority to adopt regulations requiring immunization of every child as a condition precedent to attending school." The Board went on record for continued support of the program including the fourth dose. On motion of Dr. Brian, seconded by Mr. Jackson, the Board recommended that a fourth dose of polio vaccine be administered a year after the third dose. Motion carried unanimously.

Mr. J. M. Jarrett, Director of the Sanitary Engineering Division, presented proposed Sanitation Regulations on Food and Beverage Vending Machines which have been discussed with the North Carolina Automatic Merchandising Association. Advance copies had been circulated to Board members previously so they would have an opportunity to study them. These regulations were patterned after the USPHS Code and were developed in cooperation with representatives of the North Carolina Automatic Merchandising Association, and they are requesting the State Board of Health to adopt such regulations. After a full discussion, a motion was made by Mr. Jackson, seconded by Dr. Bender, that the regulations be adopted—to become effective January 1, 1961. Motion carried unanimously.

Mr. Jarrett also presented a request from the City of Reidsville, North Carolina to allow skiing and motor boating on Lake Hunt, the municipal auxiliary water storage reservoir in accordance with regulations adopted by the City of Reidsville Council and the Recreation Commission. On motion of Dr. Dawsey, seconded by Dr. Edwards, the Board gave its approval of the request of the City of Reidsville to grant permission for skiing and motor boating as described in the rules and regulations adopted by the City Council of Reidsville. Motion carried.

Mr. Jarrett then presented a request to extend the boundaries of the Catawba Heights Sanitary District, Gaston County, North Carolina. Mr. Jarrett said that this extension was recommended by the Catawba Heights Sanitary District Board and the County Commissioners. He stated that the territory and documents had been examined by a member of his Divi-

sion staff and found to be in order and also in accordance with Chapter 130, Article 12 of the General Statutes of North Carolina. After discussion, it was moved by Mr. Jackson, seconded by Dr. Dawsey, that the Board approve the resolution extending the boundaries of the Catawba Heights Sanitary District. Motion carried.

Mr. Charles L. Harper, Director of Administrative Services, was present and reviewed briefly the status of the Department's "A" Budget request for 1961-'63. He brought out that our request had been modified somewhat on the advice of the Budget Director, Mr. D. S. Coltrane,—the net result being some reduction in three of the program requests for increases over the amounts appropriated during the current biennium.

Dr. Roger Morrison presented to the Board correspondence from the Board of Directors of the Buncombe County Medical Society, concerning the suggestion made by Dr. H. W. Stevens, Local Health Director, about the establishment of a Diabetes Detection Center in Asheville. Since this service of detection is offered only to counties in which the County Medical Society approves the establishment of such service, and since the Buncombe County Medical Society opposes such a service for Buncombe County, the State Board of Health took no action, but received the correspondence as information.

Dr. Norton reported briefly on the polio and infectious hepatitis situation in the State for this year and presented summary data sheets on each. President Bugg appointed Dr. Morrison as a committee of one to draw up recommendations as to adequate sterilization of syringes and needles to be forwarded for distribution by the Medical Society of the State of North Carolina to its members.

Secretary Norton discussed the advisability of providing the members of the Board with memberships in the American Public Health Association and the North Carolina Public Health Association in order that the members may receive the publications of these organizations and thereby be better informed in order to carry out their public health responsibilities. Approval was given for these memberships to be provided by State Board of Health funds as an investment toward more effective work by Board members. The suggestion was unanimously approved.

As information for the Board, Dr. Norton discussed a letter from Dr. L. R. Swift, Durham, Past President of the Old North State Medical Society, recommending appointment by the Governor of a Negro physician for service on the North Carolina State Board of Health, and his reply. Dr. Brian moved that, after receiving information he proposed to send, a further reply be made to Dr. Swift that the Board itself has no authority in such appointments and that the Board is very careful not to interfere with or in any way try to influence an appointment to the Board. Motion seconded by Dr. Morrison, and carried.

On motion duly made and seconded, the meeting recessed at 10:00 a.m. to attend the Conjoint Session of the Medical Society of the State of North Carolina and the State Board of Health at which President Bugg presided. There was recognition of Board members present and then Vice-President, Dr. John R. Bender, presented the annual report.

PUBLIC HEALTH AND THE PRACTICING PHYSICIAN*

By CHARLES R. BUGG, M.D.,
President, State Board of Health

The customary detailed report on the State Board of Health activities is hereby provided to the Medical Society of the State of North Carolina.

Having been suddenly projected into the public health field two years ago after more than thirty years of private practice, I have had a fine opportunity to learn how little the average practicing physician knows of the activities of the State Health Department, which is so closely allied with the State Medical Society and with the doctors' work. I humbly confess that I do not know as much about it as I would like to and as I hope to.

In this short time allotted to the State Board of Health it may be well to mention some of these activities and problems and to raise some questions to which we are seeking the answers.

Is the public money being used most economically and effectively for the purpose intended—to maintain and promote health? Are adjustments being made promptly to make immediate use of new knowledge on prevention, early case finding, rehabilitation, sanitation and health education? Are undesirable activities avoided? Is there duplication of, or infringement on, private practice? What services should be added? Is quality work assured and adequately supported? Could certain activities be done better elsewhere? Could we in private practice do more in the preventive field? Are some needed health services being splintered into agencies having less scientific guidance?

Have we helped the public to understand that the shifting emphasis from control of communicable diseases toward cutting down on chronic degenerative diseases, accidents and mental disorders involves more trained personnel, more time and more investments?

The answers to these questions are what the Board is seeking. I am pleased to say that I believe the best interests of our people are being served to the limit of available personnel and budget. We welcome advice and constructive criticism. Please feel free to give them to us, especially those with reference to any real or theoretical encroachment on private practice.

The fields of public health and private practice are closely related and should supplement each other. Of course there is overlapping. It is our desire that the two work as partners and that at the overlapping points there be a minimum of conflict. This requires real wisdom, yours and ours. Most of us on the Board fall into both classifications—public health private practice. We will be receptive to your advice and counsel. We are all dedicated to the same cause—the health of our people.

I have been pleased to see the excellent administration of the Health Department, the fine coordination of the divisions and the high type of personnel from top to bottom.

*Presented before Conjoint Session, Medical Society of the State of North Carolina and North Carolina State Board of Health, Asheville, May 6, 1959.

In North Carolina we have traditionally full coverage extending to the one hundred counties with limited centralization and much local autonomy. The public attitude toward physicians cannot be as good in the many states where rural areas have no preventive services but where as much is spent on a large central office and in a few cities.

It is apparent that, without the preventive services supplementing the work of private physicians, dentists and nurses, our welfare taxes would be skyrocketing faster than they are. This brings up a consideration of our budget request before the 1959 General Assembly and our conjoint duty to assure the continuation of these long-range tax-saving preventive health services. The one per cent increase limit now officially recommended is inadequate to even assure continuation of present services.

Starting on a fifty-fifty basis of sharing costs, the State-county ratio support of local health departments has dropped to an unfair 17-76 basis. Instead of proud leadership among states of our region on the total annual per capita State appropriation for public health, we are faced with embarrassing 1958 comparisons as follows: Georgia \$1.73, Florida \$1.49, Virginia \$1.27, Kentucky \$0.98, Tennessee \$0.89, South Carolina 0.85, Mississippi \$0.81, North Carolina \$0.70.

The scope and volume of public health work would surprise the average doctor. Perhaps few physicians realize that our Board creates sanitary districts and, to extend the bonded indebtedness for water and sewer facilities beyond a certain limit, cities must have an order from our Board. Our State and local laboratories have extended their aid to private physicians in early case finding. Virology and cytology are among the newer aids. Reduction of stream and air pollution and radiation protection will benefit everyone. Safe milk and food and clean beaches, pools and summer camps improve income and business. Occupational health services help to assure fewer growing pains from our industrialization.

Valuable assistance is provided our Medical Society Study Committees through the processing of vital data in the Statistics Section of the State Board of Health. Closer working together of private practitioners and public health staffs can certainly cut down on chronic diseases, and a start has been made in some areas against cancer and diabetes, and a small study project is underway in Person County, where chronic disease home nursing is provided under direct instructions of the private physician in charge of each case.

Our conjoint efforts with mental hospitals, similar to those long carried out with tuberculosis hospital staffs, should be equally rewarding. Our conjoint efforts in saving mothers and babies have removed many of the old heartaches from obstetric and pediatric practices. Might not similar coordinated work make some of our geriatric problems more hopeful?

Our State and local health staffs provide services to many other agencies to avoid duplication of personnel, effort and cost. Examples are: school health work including inspection of schools and lunchrooms; dietary consultation and sanitation inspection of hospitals, nursing and boarding homes, prisons, jails and other institutions; occupational health work with Industrial Commission and Labor Department; approval of plans for sanitation and food service with Medical Care Commission; extension services with State tuberculosis and mental hospitals; and cooperation with the

Department of Conservation and Development in furnishing to prospective industry our data on quality and quantity of available water supply and waste treatment needs at sites being considered for new plants.

In conclusion, I wish to assure every physician of the satisfying and constructive experience to be gained in becoming better acquainted with the work of other doctors in the State. There has never been a time when there was more need for our mutual understanding, cooperation and working together as a team for our own and the public good. We cherish our freedom and want to preserve our fine system of fee-for-service private practice. To do so, our public health physicians, as well as our friends in teaching and research, are our allies, and we should do all possible to assure a continuation of our conjoint services to our State.

PUBLIC HEALTH ASSISTS THE PRIVATE PHYSICIAN*

By JOHN R. BENDER, M.D.
Vice-President, State Board of Health

Within the past four months, I have read two scathing editorials in medical journals from other states, in which vile and ridiculous criticism was aimed at the entire system of public health—from top to bottom and bottom to top.

Editor number 1, would have his readers believe that the physician in private practice has spread himself so thin in his eagerness to serve humanity that he has welcomed an opportunity to let someone else, either individual or group within or outside the medical profession, "take over for a spell". And by so doing, he now finds that he is being gradually destroyed by the exploits of technical experts, reformers, political bureaucrats and socialistic agencies, taking over one disease and then another.

Editor number 2, was even more militant in expressing his resentment against "certain policies and practices of the local health department actively engaged in the private practice of medicine". "These infringements", he said, "are the handiwork of the local health directors, who are receiving tacit endorsement for their culpability by those in higher echelons (in the State Department)".

"The basic philosophy of this agency is socialistic", the editorial continues, "and its present position behind sacrosanct bastions is seemingly secure from reprisals".

My only reason for taking your time and mine in mentioning either of these editorials, is because there are some physicians practicing in North Carolina today, perhaps even a few of them in this audience, (yet I doubt that) who have the same feelings of resentment and garrulous criticism of the State Board of Health and the local health departments in North Carolina, as were expressed in these editorials.

As a member of the State Board of Health, I am, therefore, a party to and a part of this socialistic agency which condones the usurpation of the practice of medicine by the local health departments! Oh, that my throat was cut and my tongue torn out for being accessory to so vile an agency that, (in brief summary) has done the following:

1. We have worked unceasingly with Dr. Sam Ravenel and his committee of the Medical Society of the State of North Carolina during the 1959 Legislature to get a law making vaccination against poliomyelitis for pre-school age children mandatory!

2. The Division of Epidemiology of the State Health Department, is constantly alert to changes of incidence of communicable diseases and makes a weekly compilation of reports of communicable diseases for the sake of medical and public interest, and also for national comparisons.

Through such a compilation, interesting data are gathered for use by the local health director and the private practitioner, to warn of and prepare against possible approaching epidemics.

*Annual report before Conjoint Session of Medical Society of the State of North Carolina and State Board of Health, Raleigh, May 11, 1960.

In comparison with 1958, North Carolina in 1959, for instance had one thousand one hundred and ninety-nine (1,199) more cases of measles, one hundred and seventy-six (176) more cases of whooping cough, twice as much infectious hepatitis and more than seven and one-half times the number of cases of paralytic poliomyelitis (37 to 270).

Fifty-six per cent (56%) of the paralytic cases were children under four years of age, and less than two in five of all recorded cases of poliomyelitis had received any Salk vaccine.

Intensive investigations of all cases of typhoid, malaria, diphtheria, tularemia, brucellosis, Q fever and other infections were made. And a large number of studies relating to food-borne illnesses were conducted.

3. Statistical requests and consultative assistance reached an all-time high in 1959. The State Board of Health is the custodian of reports of morbidity, mortality, divorces, natality and other information for the entire State. Therefore, it assists professional and lay agencies in compiling data research projects.

At the present time, it (the State Board of Health) is cooperating with the Medical Society of the State of North Carolina through its committees, in supplying information for five research projects; namely: (1.) North Carolina Hospital Survey, (2.) Neonatal Death Study, (3.) Maternal Health Committee, (4.) Auto Crash Injury Research and (5.) Anesthesia Study.

Within the past decade there has been a reversal of the trends of causes of death in North Carolina. Tuberculosis, which has heretofore been one among the ten greatest killers within this State, was responsible for only two hundred eight (208) deaths in 1959. But as the morbidity and mortality from the communicable and infectious diseases becomes less and less, the State Board of Health becomes more and more concerned with the problems of chronic and degenerative diseases such as early cancer detection, protection against cardio-vascular-renal damage and guidance to avoid mental and nervous breakdowns.

We also find increased emphasis on maternal health, congenital defects, handicapped children, occupational health, improved and revised standards of sanitation, food-borne diseases and many other problems and programs that have direct influence upon the properties, industries, health, and life of the people of this State.

4. The State Board of Health, through its Occupational Health Section, serves in planned engineering and medical activities with the Department of Labor and the Industrial Commission, permitting closer coordination of health services with industrial programs. Last year, the industrial hygiene engineers inspected over three hundred (300) plants (10% more than previous year), for dusts, fumes, chemicals, vapors, ionizing radiation and other health and occupational hazards.

The Section also co-sponsored seminars on ventilation at North Carolina State College and in radiological health and industrial nursing at the University of North Carolina and was assigned the major responsibility in coordinating the radiological health program as required by law through 1959 legislation.

5. The Veterinary Medical Section of the State Board of Health is cooperating with the Department of Agriculture in investigations of diseases of animals transmissible to man.

One big project for the past two years was to determine the degree of contamination in poultry processing plants with various species of salmonella organisms. In one plant, a total of thirty-two per cent (32%) of processed fowls were infected with these pathogens.

The Veterinary Section continues to strengthen its program in the eradication of rabies, which has been a major health problem in several counties of the State the past year.

The Department continues consultative cooperation with the Department of Agriculture in problems of mutual concern (such as meat and milk inspections) aimed at producing wholesome high quality food products of animal origin.

6. Accident prevention is becoming one of North Carolina's major public health activities. In an effort to reduce death and injury from farm and home accidents, the Accident Prevention Section, State Board of Health, continues its educational program on accident prevention for public health workers, home demonstration club leaders, 4-H club groups, PTA meetings, civic clubs and other community workers.

7. Nervous and mental disorders are gradually consuming a large portion of the private practitioner's time and making greater demands upon local health authorities each year.

In 1959, eleven (11) mental health clinics held over thirty-two thousand (32,000) patient interviews. Forty-nine per cent (49%) of these patients were under eighteen years of age.

The mental health section also provided consultation service to schools, courts, industries, welfare departments, doctors, ministers, nurses and other groups or agencies.

Mental health clinics were established in two additional county health departments, and part-time assistance was supplied to three others.

8. The State Board of Health operates under the philosophy that, following preventive efforts, early detection and correction of defects is the next step toward good health. It finds its best application of this philosophy through the Division of Oral Hygiene and Crippled Children's Clinics of the Personal Health Division.

a. The program of dental health serves the children of elementary school age with the aim of aiding all children to learn the importance of activity seeking good dental health. A program was initiated during the past year for the collection of base line data on the dental condition of children of school age in areas which are just beginning fluoridation, and in areas where fluoridation has been in operation several years.

From data thus obtained, indications are that in areas where fluoridation has been present for five years, the decay rate among children between six and twelve years, has been reduced at least forty per cent (40%).

It seems unfortunate, therefore, that only thirty-one (31) towns and cities in North Carolina, and less than 800,000 of its population are fluoridating their water supplies, even though the North Carolina Dental Society, the Medical Society of the State of North Carolina and similar medical, dental and public health national organizations have endorsed fluoridation as being safe and beneficial in the lessening of dental caries.

b. The forty-five (45) Orthopedic Clinics of the Crippled Children's Section experienced a gradual increase in the patient load of each pro-

gram. There was also a continual patient increase in the seven (7) Rheumatic Fever and four (4) Speech and Hearing Clinics. Even though this Section has suffered the loss of a nurse consultant in Child Growth and Development, one additional Speech and Hearing Clinic has been opened this year.

9. The Sanitary Engineering Division made a complete sanitary survey of jails and city lock-ups, and assisted the Prison Department in the inspection of highway prison camps.

Sanitary inspection of nursing homes and homes for the aged continued unabated. Many of the conventional sanitation activities were expanded because of population growth and industrial development.

Foodhandling regulations were revised to include sanitation standards for outdoor dining areas, and during the year special attention was given to water and sewage disposal problems in the coastal counties.

10. The Laboratory Division is an institution within itself, and one which has rendered faithful, conscientious and competent service to the people of this State since its first Director began work in 1908. There were no changes in 1959 except in additional examinations.

Your Laboratory Division is continually reviewing and evaluating its program and looking for newer methods and laboratory techniques to better serve the people of North Carolina, within the structure of the State Board of Health.

The Laboratory Director, Dr. John H. Hamilton, resigned April 30, after serving the State faithfully and competently for forty years—the first eleven in New Hanover County. His dedication to the field of public health has been for the citizens of North Carolina, a providential blessing beyond the realm of tangible values. Testimonials and expressions of appreciation for his services are to be conferred upon him at a later date under more appropriate circumstances. It suffices here to say that the Laboratory Division will always be, to those of us who are fortunate enough to have known Dr. Hamilton, a symbol of unselfish service and a monument to his memory.

The work and service of many other Divisions and Sections within the State Board of Health deserve commendation and should be mentioned but time does not permit.

11. I would be derelict in my duty toward you on behalf of my colleagues who serve on the State Board of Health, if I failed to mention the excellent administration of the State Board of Health under Dr. J. W. Roy Norton. It is almost inconceivable that Dr. Norton can perform his executive and administrative duties and also engage in the many activities which he does that involve public relations on behalf of the State Board of Health and the Medical Society of the State of North Carolina.

In order for North Carolina to maintain its commendable health position, it is necessary for the State Health Director to keep abreast of the developments in the field of health affairs, through the State and over the nation. This is done through wide professional reading, attendance at regional, national and international conferences and frequent visits to various sections of North Carolina. By such visits and through such professional contacts, the State Health Director is able to keep in close touch with industrial and agricultural development and to identify the approaching public health needs, and promote measures for meeting those needs.

12. Other activities of the State Board of Health are continuing unabated through the various Divisions and Sections and through our chief aim of service—the local health departments serving all one hundred (100) counties.

The enlargement of programs to deal with chronic diseases and care for the aging, tops the list of North Carolina's public health needs for the year ahead.

Perhaps there remains in the minds of some, the editorial ideas expressed in the beginning. If so, this brief and partial summary of the activities of public health work in North Carolina has been of value, only insofar as it has fulfilled the requirements of law. If it has given to some a better understanding of the inner workings of the State Board of Health, and local health departments and serves as a basis for a more understanding attitude toward the local health departments and the State Board of Health, time will not have been in vain and this report will have served its intended purpose.

BIENNIAL REPORTS

State Health Director

Dr. J. W. R. Norton has performed his duties as State Health Director in addition to his service as Secretary-Treasurer of the State Board of Health, reported elsewhere in this biennial report of the agency's activities. He is also chairman of the Committee for Postmortem Medicolegal Examinations, reported elsewhere.

As State Health Director, Dr. Norton has engaged in the executive duties of that office but has maintained many contacts of a liaison nature. He has maintained contact with the United States Public Health Service, with other State departments of public health, and with all other agencies, both official and voluntary, whose activities and purposes have a bearing on the health of the people in North Carolina. There has been an increase in the number and activity of the voluntary health organizations in recent years, thus increasing the importance and complexity of these contacts.

General overall direction has been given by the State Health Director to all divisions of the State Board's work. In addition, he has been active in the affairs of those organizations with which the State Board of Health is affiliated.

In addition to his official duties at the State Board office, the State Health Director has attended conferences and conferred with officials on health matters in many parts of the State. Membership on national committees of health organizations has entailed a number of necessary meetings in various parts of the nation. Out-of-State meetings usually attended by the State Health Director include the American Public Health Association, the State and Territorial Health Officers' Association, the Southern Branch of the American Public Health Association, and the American College of Preventive Medicine. He has served as president or chairman of major committees in these organizations.

Reports of the activities of the seven divisions of the State Board's work follow:

Biennial Report

ADMINISTRATIVE SERVICES

July 1, 1958-June 30, 1960

Central administrative services and certain staff functions of the State Board of Health, including Budget, Personnel, Public Relations, Public Health Library, Film Library, Central Files, Supply and Services, were placed under the supervision of the newly created position of Director of Administrative Services in April, 1958.

The activities reported for this biennium reflect this change in the organizational pattern of the Department. Central administrative functions were, prior to that time, directly supervised by the State Health Director. With the addition of a full-time person, trained in public administration, the State Health Director has been relieved of much administrative detail, making possible the devotion of more time to other matters requiring his personal attention. At the same time, this change has facilitated the further developments of administrative methods and procedures.

In addition to responsibility for central administrative functions, the Director of Administrative Services serves as an advisor to the State Health Director and Program Directors on administrative aspects of program planning and implementation.

Mr. Ben Eaton, the first appointee to this post, served from April, 1958 until July, 1959. The present incumbent, Charles L. Harper, was appointed January, 1960.

Some of the major achievements in Central Administration during this biennium include the following:

1. Formation of Supply and Service Section

Prior to this period, the several general service functions, such as mail service, reproduction of forms and printed materials, building maintenance, office and other supplies, and messenger service were each handled as separate functions, under the direction of the State Health Director, Budget Officer and others. In July, 1959, these functions were combined forming the Supply and Service Section, under the direction of a Section Supervisor. This consolidation has been immensely beneficial to the Department in the coordination and supervision of these functions, and has resulted in not only a more efficient operation, but also a financial savings in many areas.

2. Moderization of Accounting System

A system of accounting employing the "program" and "single fund" concepts, was installed during this period. This conversion was designed to eliminate much of the detailed record keeping previously necessary, and related the budgeting and expenditure of funds more closely to program functions. All funds expended are now identified by one of several program "objects" of expenditure. Additional mechanization of the new system was also made possible through the use of IBM machines in the tabulation of expenditures.

3. *Inventory Control System*

During the last half year of the biennium, an equipment inventory control system was established and responsibility for its maintenance assigned to the Supervisor of Supply and Service Section. The new system will permit a perpetual inventory of all equipment purchased from State and Federal Funds, with identification as to description, cost, fund, date of purchase and location.

4. *Travel Manual*

A travel manual containing regulations, policies and procedures was developed in order to combine and bring up-to-date the administrative guidelines pertaining to official travel, and to facilitate the dissemination and use of this information by Department personnel.

5. *Analysis of Annual Expenditures*

Because of the need for, and interest in, a breakdown of State Board of Health disbursements between State level and local activities, work was begun on developing records from which this data could be tabulated. Heretofore, it has not been possible to accurately compute the total direct State and Federal contributions to each county.

Reports of individual sections follow.

CENTRAL FILES

The Central Files operations continued to expand and adjust with the increasing and changing program activities. The centralized control of records establishes the responsibility for recording, protecting, and filing the official records and their finding when needed. It controls the systematic retirement of records to storage and the disposal of those no longer of administrative, historical, research or legal value. It establishes practical standards for procedures and operations, file arrangements, equipment and supplies.

During this period, 444,433 records were received for filing, and 62,966 searches for material and information were made. Emphasis was given to improving the accuracy of operations and to assisting in working out record keeping problems with staff generally.

SUPPLY AND SERVICE

During this period, the Supply and Service Section completed the consolidation of related functions with the transfer to it drug distribution responsibility previously assumed by the Film Library.

Regular activities continued to increase in response to heavier demands from operating programs. This acceleration of activity is evident from the following:

	1958-59	1959-60	Inc.
Multilith copies reproduced	6,537,137	8,287,588	1,750,251
No. Educational materials & supplies distributed	2,277,350	4,324,015	2,094,665

On July 1, 1959, a Xerox machine was added to the section. Xerography is a newly developed process of duplication of any materials typed, printed, written or drawn. This has resulted in a significant savings in the cost of reproduction of printed materials used by the State Board of Health.

Considerable time was spent in developing the forms and instructions, and in other work connected with the inventory system referred to above.

FILM LIBRARY

The Film Library contribution to the education program of the State Board of Health increased substantially during this period as evidenced by a record distribution of 31,141 films, as contrasted to 25,008 for the previous biennium. This growth would have been even more pronounced had sufficient funds been available for purchase of films. There were 1,529 requests for films denied because of either not having the film or sufficient prints to meet the requested schedules. It is interesting to note that there were 53 requests denied for one film title, despite the fact that the Library owns 7 prints. All prints of this film were either in use or in transit constantly since their purchase.

Although, State funds appropriated for film purchase for this biennium, this reduction was offset in part by the use of funds appropriated to specific programs and utilized for purchase of films. Total expenditures for new films and replacements during the biennium amounted to \$16,199.40.

Over 6,000 film catalogues were printed and distributed to film users throughout the State.

Responsibility for distributing drugs to local health departments for the Venereal Disease and Crippled Childrens' Programs was transferred from the Film Library to the Supply and Service Section in April, 1960.

PUBLIC RELATIONS

Mr. William H. Richardson served as Public Relations Officer during this biennium until his retirement September 30, 1959. His long and faithful and effective service made a lasting contribution to public health in North Carolina as he interpreted the aims and programs to the public in various ways and through many media.

On December 1, 1959, Dr. Edwin S. Preston was appointed by Dr. J. W. R. Norton, the State Health Director, to assume the duties as Public Relations Officer for the State Board. He had served for eight years as Director of Publications and Information and Editor of *Public Welfare News* for the N. C. State Board of Public Welfare.

Since taking up this work, Dr. Preston has carried on the public relations activities of the State Board through all news media. The activities of the various divisions and of the local health departments have been made the subject of many articles appearing in newspapers throughout the State. In addition, he has conducted radio and television programs and has made addresses at meetings emphasizing public health and in meetings with related purposes. He has represented the State Board at a number of statewide conferences. He has also given counsel to State and local staff members in the area of public relations.

Upon the retirement of Dr. J. H. Hamilton on April 30, 1960, Dr. Preston was named Editor of *The Health Bulletin* and continues in this responsibility as well as that of Public Relations Officer.

MEDICAL-PUBLIC HEALTH LIBRARY

Since its opening in 1954, with financial support from the Z. V. Reynolds Foundation, the Library has been increasing as an important adjunct to the programs of the State Board of Health. This fact is demonstrated in the increase in visits to the Library and in the number of volumes loaned during this biennium as compared to the previous one, as follows:

	1956-58	1958-60
Visits to Library	9,049	9,333
Volumes Loaned	7,065	9,222

There was also a substantial increase in the number of communications routed to departmental staff relative to new additions to the Library, and in personal communications between the librarian and other staff members.

Although the Library did not increase its number of books, at the same rate as the previous biennium, 417 were added during the period. The rate of growth is, of course, limited by the availability of funds for purchase of books and periodicals.

A significant development in the biennium was the inclusion of the librarian among the classified positions of the State Board of Health. This occurred with the expiration of the Z. V. Reynolds Fund and the consequent acceptance of the librarian position by the State Personnel Department.

In accordance with the Library's policy of providing a type of service not available at most libraries, the librarian has made an effort to be of as much help as possible to staff members and others engaged in research, the writing of papers, the preparation of bibliographies, etc. Authors have been assisted in the editing of their manuscripts. Copy and proofs for *The Health Bulletin* have been read and edited.

Visitors outside the medical and public health fields have been welcomed and helped in assembling material for the work in which they were engaged. Books, journals and other research material not available in the Library have been obtained upon request on Interlibrary Loan from other libraries, which have been most cooperative.

Especially helpful has been the National Library of Medicine, an agency of the U. S. Public Health Service, which now has a relatively new policy of providing without cost to other libraries photostats of requested articles, instead of sending the articles themselves on loan. This makes it possible for Library patrons to obtain permanent possession of needed material and saves considerable time and effort that would otherwise be devoted to packing and mailing borrowed material. Reports and reprints of journal articles have also been obtained for Library patrons from the authors.

Other services provided by the Library include the furnishing of information regarding new books and the addresses of book publishers; issuance of the weekly *Library Notes*, calling attention to material dealing with medicine, public health, etc., appearing in current magazines and journals and listing books recently added by the Library; the sending of mimeographed messages to new members of the State Board of Health staff describing the Library's facilities and inviting them to make full use of them; and welcoming visitors from all over the State and from other states.

PERSONNEL

The Personnel Section implemented salary increases and revised salary ranges for the state staff as a result of legislative action.

A new normal pay plan was adopted on a permissive basis July 1, 1958, becoming mandatory on July 1, 1959, to permit local health departments to adopt salary ranges suited to their economic situation and their recruitment problems. Revised salary regulations permit local appointing authorities to select the normal range or a range above or below the normal for the following separate categories: Health Directors, Psychiatrists, professional classes and clerical classes. Local appointments can be made as high as the third step based on additional qualifications.

Changes in the classification plans for both state and local health departments were as follows: 15 new classes, 63 revised, and 21 deleted. There were 44 revised salary ranges for state positions in addition to total revisions of 141 due to legislative action and 2 local revisions in addition to total revisions of 76 due to installation of the normal plan.

Other activities of this office include administration of salary increment program for state staff, survey of state personnel 60 years of age and over for retirement purposes, recommendations that more professional classes be included on the continuous examination program, and preparation for conversion to new state compensation plan effective July 1, 1960, which provides longer ranges and larger increment amounts.

The following actions by the 1959 Legislature affected our personnel in addition to salary increases: reimbursement of certain expenses for state employees directed by the agency to transfer to a new location, transfer of Water Pollution Control from the State Board of Health to the Department of Water Resources, and creation of a State Board of Sanitarian Examiners.

Within the State Board of Health there were 217 appointments and reinstatements, 252 separations, 84 reclassifications, 459 salary increments, 353 legislative increases, 60 other salary increases, 745 budget code changes, and 91 employees certified as permanent.

As of June 30, 1960, there were 362 employees of the State Board of Health and 45 vacant positions. There is a decrease of 22 employees from the last biennium (partly due to transfer of Water Pollution Control.)

In local health departments there were 608 appointments, 596 separations, 294 reclassifications, 1,706 salary increases, and 309 employees certified as permanent.

As of June 30, 1960, there were 1,259 full-time employees in local health departments and 57 vacant positions. This is an increase of 67 employees from the last biennium.

BUDGET OFFICE

No. of Purchase Orders Written 2,149

No. of Vouchers Written (Includes Payroll) 31,810

BIENNIAL BUDGET

	Total	State Appropriations	Federal Funds	Departmental Receipts	Local Appropriations
Fiscal Year Ending June 30, 1959:					
Local Units:					
Regular Health Departments (80)	\$6,761,823	\$1,132,000	\$234,840	\$ —	\$5,394,983
Mental Health Centers (10)	474,876	145,000	100,876	—	229,000
Total-Local Units	7,236,699	1,277,000	335,716	—	5,623,983
Other (See Note Below)	4,424,065	1,790,944	2,355,983	278,038	—
Total	11,661,664	3,067,944	2,691,699	278,038	5,623,983
Fiscal Year Ending June 30, 1960:					
Local Units:					
Regular Health Departments (80)	7,164,272	1,132,000	232,950	—	5,799,322
Mental Health Centers (14)	616,021	145,000	113,267	—	357,754
Total-Local Units	7,780,293	1,277,000	346,217	—	6,157,076
Other (See Note Below)	4,385,534	1,860,880	2,269,792	254,862	—
Total	12,165,827	3,137,880	2,616,009	254,862	6,157,076
Total for the Biennium	\$23,827,491	\$6,205,824	\$5,307,708	\$532,900	\$11,781,059

Note: Total "Other" includes the following:

	Fiscal Year Ending		Total
	6-30-59	6-30-60	
(1) Division of Water Pollution Control—This Division and its entire budget was transferred from the State Board of Health to the Department of Water Resources on September 1, 1959—(State Appropriation: \$159,865; Departmental Receipts: \$16,339; Federal Funds: \$85,695)	\$261,899	—	\$261,899
(2) Funds For the Purchase of Polio Vaccine:			
State Appropriation	\$ 62,600	\$143,454	\$206,054
Federal Funds	146,048	—	146,048
Total	\$208,648	\$143,454	\$352,102

LOCAL HEALTH DIVISION

July 1, 1958-June 30, 1960

Public Health Services continue to be available to every county in the state and during the biennium, July 1, 1958 to June 30, 1960, a study was made in order to determine salary increases in the classification of Health Directors. This study was prompted by our inability to recruit satisfactory medical personnel.

It was found that during the year 1958 the average salary for the classifications of Health Directors for the State of North Carolina, was \$8,700.00. In observing increases in local budgets we noted that in the year 1959 the average salary was \$11,040.00 for Health Directors. Particular attention has been paid to increases for all disciplines and while we do not have a percentage set up, we do know that increases in most counties have been regular. The percentage represented in the increase in Health Directors' average salaries represented 27%. In some instances it was necessary to obtain Merit System Council approval by special dispensation. The Council met our request for Public Health and Mental Health disciplines.

The biennium closed with sixty-one (61) *full-time* positions budgeted for Health Directors. Fifty (50) of these positions were filled and eleven (11) vacant. Of the eleven (11) *full-time budgeted* positions for Health Director vacant, all but three (3) are served by part-time directors. This has been the usual administrative procedure for many years.

We are in the process of requesting full-time service in each of the counties represented by part-time services but in some instances the population is so small and adequate tax monies not available so we must create district departments. In some instances this is accomplished by maintaining the identity of the county board of health in each county concerned but securing the professional services of the health director from the adjoining county and classifying him as a full-time Health Director.

We have four (4) adequately financed areas requesting the services of full-time Health Directors and we anticipate fulfillment of full-time services in the very near future as our prospect list is increasing in numbers as we obtain higher salary scales for the recruits.

We have had excellent cooperation from the Medical Care Commission in further improving our health facilities in the various counties during this biennium. Seven (7) new Hill-Burton health facilities have been constructed and three (3) are under construction or in the planning stage. We are grateful to the Medical Care Commission for their participation in furnishing financial assistance to the counties by contributing up to 55% toward the construction of these Hill-Burton facilities.

Continued interest is shown in the programs being offered by the nine (9) health districts organized in the state during the biennium. District meetings were planned in seven (7) of the areas and they presented some very interesting and constructive programs. The other two (2) areas are still in the planning stage and we are looking forward to their early par-

ticipation. A chart showing pertinent information on the nine (9) health districts as of January 1, 1960 is attached.

Detailed reports of the various Sections in the Division follow:

ADMINISTRATIVE SECTION: The Administrative Section for each year of the biennium 1958-59 and 1959-60 continued to allocate to the local health departments the same amount in regular State funds, as it had allocated each year since the 1948-49 allocation—\$1,132,000.

Total Federal funds including mental health and special grants, available to the local health departments for fiscal year 1958-59 were \$320,000 and for the fiscal year 1959-60 were \$319,105. Local funds for the fiscal year 1958-59 were \$5,619,843.30, and for fiscal year 1959-60 were \$6,157,105.40.

This represents an increase of \$1,545,697, or 15% over the amount for the previous biennium.

At the close of the biennium it is noted that 79.4% of all funds in support of the local health program comes from local sources, 16.5% from State funds and 4.1% from Federal funds.

As of June 30, 1960 there were budgeted in the 100 counties and two city health departments a total of 1,316 full-time positions. Of this number 61 were health director, 4 assistant health directors and 6 dentists. There were 38 supervising public health nurses, 502 staff nurses, 238 sanitarians, engineers, and veterinarians, 6 public health investigators, and 12 health educators. The remaining personnel consisted of 449 clerks, bacteriologists, technicians, mental health personnel, maids, etc.

There were 57 budgeted positions unfilled because of unavailable funds and untrained personnel. The attached pages show pertinent data sheets for the two fiscal years.

TRAINING: Within its budgetary limitations, the State Board of Health during the biennium made possible some type of training for the following personnel, ranging in length from one week to one year, or more:

- 4 health directors given orientation in local health departments.
- 7 health directors attending a Refresher Institute, Louisville, Ky.
- 17 Public Health Nurses awarded scholarships at various Universities, period of training ranging from 8 weeks to 12 months.
- Public Health Nurses took Special Fields as follows: 18 took course in T.B. Control; 29 in Chronic Disease Control; 17 in Cancer Control, and 19 in Cardiovascular Disease.
- 53 Nurses had courses in Principles and Practices of Public Health Nursing and Public Health Nurse in a Maternal Health Program.
- 8 Hospital nurses given training at Duke Hospital in Premature and Newborn Care.
- 83 Nurses had observation and orientation experience at the State Mental Hospitals.
- 2 Psychiatric Social Workers completed training during the biennium.
- 1 Physical Therapist given a scholarship at Duke University.
- 1 Sanitarian completed 9 months course in P.H. Sanitation at the University of N. C.
- 25 Sanitarians given 4-week course at the University of N. C., and 22 sanitarians given 4-week course at N. C. State College; 11 Sanitarians given 4-weeks orientation in selected local health departments.
- 4 Laboratory Workers had expenses paid for special training in Lab. work.
- 184 Public Health and Welfare workers had orientation at Caswell Training School.
- 28 Public Health workers attended Workshops in Community Mental

Health at Pisgah View Ranch, Candler, North Carolina (tuition paid to the University Extension Div.)

19 clerks from local health departments given two weeks course in Records Short Course at the University of North Carolina.

8 Deputy Registrars from local health departments given training in statistical work at the State Board of Health.

RECORDS AND PROCEDURES ANALYSTS: The two weeks basic course for clerical personnel in local health departments which has been held each year in connection with the School of Public Health in Chapel Hill, was held for the tenth year in November, 1959 with 18 in attendance. This brings the total to 148 girls who have attended this course.

The workshop in vital statistics for deputy registrars was begun in 1957, and continued in 1958 and 1959. Twenty-two deputy registrars (who and clerks in local health departments) have attended this. It was not held in 1960 but will be continued again.

Consultation from this section was given to some divisions in the State Board of Health regarding certain forms and reports which will be used by local health departments. This included Sanitary Engineering, Budget Office, Occupational Health, Personal Health, Mental Health, and Diabetes.

Work was done with the State Department of Archives and History in regard to the development of the County Records Manual which provides recommended schedules for the retention and disposal of county records.

Special projects included completion of the Guilford County Record Project which was mentioned in the last biennial report, and participation in the Pamlico County-wide Tuberculin Testing Pilot Study.

Developing a Records Manual for use in local health departments is the long range project for perhaps a couple of years. More mention will be made of this in forthcoming reports.

Stimulating and encouraging better records and reports continued to be a basic goal and many visits were made to local health departments for this purpose.

PUBLIC HEALTH NURSING SECTION: The professional staff of the Public Health Nursing Section consists of a chief and seven area generalized public health nursing consultants—three of whom provide consultation state wide in: Planned Parenthood, Tuberculosis and Nursing Homes and Boarding Homes.

During the biennium, this staff made 1,251 visits to local health departments for consultation. Vacancies of the section include assistant chief and two generalized public health nursing consultants. Seven other nurses are employed at the State Board of Health but are administratively placed in other sections.

A total of 540 full-time nursing positions are budgeted by local health departments. These include 5 directors, 33 supervisors, 489 staff public health nurses and 13 clinic nurses. The average ratio of public health nurse to population is 1:8500; 20% of the counties of the state are served by only one public health nurse and 50% of the counties are served by three nurses or less; 50% of the public health nurses have completed one or more courses in public health nursing; the percentage of our local public health nurses academically prepared in public health made a slight increase from 29.2%-31%.

Two factors are responsible for this increase: more of the graduates from our collegiate schools of nursing are coming into public health and scholarships which are available under Title I of the Health Amendments Act have prompted some of the employed nurses to return to school for completion of preparation in public health nursing. Staff turn over continues to be between 15-20%.

The nurses who come into the field of public health without academic preparation in the field continue to take short courses provided by the School of Public Health, University of North Carolina. Because of this plan, the percentage without academic preparation in public health has decreased as follows: 1956—40%, 1958—30%, 1960—18%.

Other staff education activities continue to be evaluated and strengthened. Most of the small health departments participate in a district inservice education plan based on needs of the nurses in relation to the programs of of departments.

Plans for public health nursing services to the patients of the state hospitals for the mentally ill have continued to develop. At the present time, 19 health departments provide this service.

Consultation to boarding homes and nursing homes have increased under the guidance of a public health nursing consultant.

Reports indicate a definite increase in public health nursing services to the chronically ill referred by private physicians and hospitals.

A recent time and cost study of public health nursing services by five local health departments indicates that 25% of the nurse's time is spent in school health activities, 17% in general health services, 15% in the field of maternal and child health and 14% in communicable disease control.

HEALTH EDUCATION SECTION: The Health Education Section has as its major purpose the improvement of opportunities for people in the state to gain knowledge and to develop attitudes and habits that will contribute to their own and their community's health, in the broadest sense. The Section staff seeks to accomplish this purpose by encouraging and assisting the educational efforts of other sections of the State Board of Health, of local health departments and other local organizations, and of state-wide groups with an interest in health.

The staff consists of three professional health educators and a secretary. The Section Chief is responsible for the administration of the Section and gives consultation to twenty-four counties in the eastern part of the state. The western consultant serves forty-five western counties and the Charlotte Health Department. The middle thirty-one counties and Rocky Mount are the district of a consultant who began work at the start of this biennium. The three professional workers share the consultation duties with sections of the State Board of Health and with state-wide organizations.

A major emphasis of the Section is the promotion of local health education programs. Although every member of a health department has a definite responsibility for health education, it is widely recognized that a county of 50,000 or more needs a trained person who can give full time to educational activities and can assist all staff members on a day-to-day basis with their educational work.

At the beginning of the biennium nine health departments had twelve budgeted positions. At the end of the biennium eleven departments had

thirteen and a half positions, and a twelfth department was probably going to have a position. Eleven health educators were on the job at the beginning of the biennium. Three resigned and two were employed.

As the biennium ended there were ten persons at work, and local health directors were trying to recruit for three and a half positions. In January, 1960 the Section had a meeting of local health directors who employ health educators to discuss how local health education program might be made more effective.

The western and central consultants have made professional visits to these health educators, who are located in their districts, regularly. New employees are visited every month and more experienced ones every six months. Other visits are made on request. In addition, the Section takes the lead in a semiannual conference of these and state official agency health educators for inservice training.

Consultants work with local health departments without a health educator. For most of the year there have been 90 of these. Most of the counties have requested help during the biennium. Typical requests are for assistance in interpreting the health department's program to the public, for consultation on the planning of the school health program, and for mobilizing citizen interest and participation in such activities as a home nursing program. The health education consultant goes into the community to work with health department personnel and community agencies and groups interested in the matter. The Section staff continues to publish a quarterly bulletin, *The Bulletin Board*, for local health departments.

The staff assists the State Board of Health as a whole through leadership in the inservice activities of the organization and by coordinating exhibits for the State Fair. In the fall of 1958 a conference on health education was held in preparation for the Twelfth World Health Assembly in the summer of 1959 when the subject for discussion was Health Education of the Public.

Requests for assistance to sections and divisions are met. Within the biennium these have included: serving on the staff both years at the Pisgah Mental Health Workshop, sponsored by the Mental Health Section; helping plan and carry out a diabetes seminar for two public health districts, sponsored by the Chronic Disease Section; and taking part in the short course offered local secretaries each year, sponsored by the Records and Procedures Analysts of the Local Health Division.

Of many services to state-wide organizations, these are outstanding: the western consultant has served as vice-president and program chairman for the North Carolina Public Health Association; two staff members are board members of the North Carolina Congress of Parents and Teachers, concentrated help has been given the North Carolina Health Council and the North Carolina Governor's Conference on Aging.

At the close of the biennium a new position is established for a third consultant. This is necessary to enable the staff to meet requests and fulfill its responsibilities. A new responsibility about which planning is underway is the establishment of a program of education in the field of radiological health. In this and in other fields of public health, education is a major need.

MENTAL HEALTH SECTION: During this biennium the community mental health program expanded at a rate greater than during any previous

biennium. New mental health centers were established in Rowan County and in Wilson County. Community consultation programs were established in Halifax County, Cabarrus County and Gaston County. The High Point branch of the Guilford County Clinic became a full-fledged clinic.

The Albemarle Clinic, which was established in the previous biennium, suspended operations by mutual agreement between the State and local governing authorities with the expectation that this clinic would reopen as soon as local community and financial support justified this move. All other facilities showed additions to staff. During this biennium the number of professional staff members employed increased from forty-six to sixty-two. Every center now has at least one psychiatrist on the staff; nine of the eleven have at least one full-time psychiatrist.

During this period the Charlotte and Mecklenburg County Mental Health Center was approved by the American Association of Psychiatric Clinics for Children; the Durham Clinic had previously been approved. The Charlotte and Mecklenburg County Mental Health Center is now housed in a new wing of that Health Department.

During this biennium nine of the eleven clinics introduced the practice of group therapy and now use this extensively. The training program for professional personnel was expanded. Five clinics provide training for psychiatric residents; three for clinical psychologists and three for psychiatric social workers. The State Board of Health furnished stipends for the graduate training of two psychiatric social workers both of whom are now employed in community clinics in this State. Large numbers of nurses spent a period of five days orientation in the nearest state hospital in preparation for nursing aftercare programs for mental patients discharged from the state hospitals. The State office has provided continuous consultation and training for all existing facilities. Local facilities have provided training for ministers, welfare workers, public health nurses, juvenile court personnel and many other community groups.

The large State library of mental health films is in constant circulation to local community groups. The State library of mental health books continued to be circulated to the local communities. Thousands of mental health pamphlets were distributed free from the State Board of Health to lay groups throughout the State.

The nationally recognized Community Mental Health Workshop was continued during each year of this biennium and trained professional workers from North Carolina and a like number sent from agencies in twenty-three other states.

As a direct result of expanded services the number of patients seen in the mental health centers increased from 7,212 in the previous biennium to 9,764 in this biennium. The total number of interviews with or about patients increased from 31,542 in the previous biennium to 62,799 in this biennium.

All of the above development and expansion of services was done without any increase in State appropriated funds.

SCHOOL HEALTH COORDINATING SERVICE: The School Health Coordinating Service continued to work under the joint administration of the State Board of Health and the State Department of Public Instruction.

Mrs. Annie Ray Moore, Health Educator, resigned November, 1958 to

accept a position with the World Health Organization, assigned to work in India. Miss Frances Kornegay who served during the school year 1959-60 as a principal of an elementary school in Goldsboro was employed July 11, 1960 as a Health Educator to fill the position formerly occupied by Mrs. Moore. Miss Kornegay has served as a Health Educator in Wayne County, as a teacher in the schools of Wayne County and Goldsboro and for a short time with the Tuberculosis Association with the State Board of Health.

Dr. Robert M. Fink, Mental Hygiene Consultant, was transferred from the School Health Coordinating Service to the Mental Health Section of the State Board of Health in October 1959.

Mr. Floyd Woody, formerly principal of the Hall Fletcher Junior High School in Asheville and who also has served as a physical education teacher and coach, was employed August 14, 1959 as Adviser in Physical Education.

Mr. Raymond Rhodes was transferred from the position of Adviser in Physical Education to Adviser in Health and Physical Education to succeed Dr. J. L. Pierce who was appointed Director of the Division of School Planning.

Staff members worked primarily with school and health department personnel but continued to cooperate with other agencies and organizations concerned with the health and fitness of school age boys and girls.

The School Health Coordinating Service, under the direction of the State Superintendent of Public Instruction and the State Health Director, administered the expenditure of State Board of Education "school health funds" amounting to \$435,992 for the year 1958-59 and \$445,608 for the year 1959-60, in accordance with State laws and policies adopted by the State Department of Public Instruction and the State Board of Health.

"School health funds" were allocated each year of the biennium to local school administrative units on the basis of \$.35 per pupil in average daily membership plus \$750.00 for each county regardless of the school population. Plans for the expenditure of the funds and school health budgets were prepared jointly by the school superintendent and health director.

Staff members of the School Health Coordinating Service worked with school and health department personnel in much the same way as in former years except that, because of several vacancies, on the staff during the biennium, the amount of services rendered were seriously curtailed. Most of the work was rendered upon request of some emergency nature needing immediate attention.

Most of the work of the staff in the field was concerned with:

- a. Health services including assistance with plans and budgets for the expenditure of school health funds in accordance with law and policies, in-service education in teacher screening and observation of children with some special emphasis on vision testing with the snellen chart and audiometer testing for hearing defects.
- b. Health instruction in all of the various phases of health in grades one through twelve in accordance with the needs of children and the known health problems of the local community, State, and nation. We worked closely with the State Board of Education Curriculum Study Committee.
- c. Healthful school living or the environmental aspects of health which can

serve as a laboratory for learning experiences as well as being a healthy place to live seven or more hours per day.

- d. Physical education which is required 30 minutes per day in grades 1-8 and the 9th grade is required three periods per weeks.
- e. Mental hygiene services which were seriously impaired by the transfer by the State Board of Health of Dr. Robert M. Fink from the School Health Coordinating Service to the Mental Health Section of the State Board of Health.

Health Services Rendered With School Health Funds July 1, 1958-June 30, 1959

Defects	No. Children Having Defects Corrected
Tonsils	3,626
Teeth	15,523
Ears	184
Hernia	134
Orthopedic	15
Intestinal Parasites	421
Eyes (glasses)	3,318
(surgery)	36
All others	1,392
Eye Examinations	1,423
Physical Examinations	263
Pre-school Clinics	55
Chest X-ray	4

In addition to the above health services every county in the State has a local health department that provides health services such as examinations and immunizations to school children.

PERTINENT INFORMATION ON NINE HEALTH DISTRICTS:
North Carolina, January 1, 1960

Population, Area, Personnel By District

DIST.	POP.	SQ. MI.	CO.	FULL TIME H. D.	PART TIME H. D.	CLKS.	DIR. SAN.	DIR. SAN.	P. H. N. P.	H. N. P.	H. E.	M. H. SER.	P. S. W.	PSY- CHOL.	PSYCH.
1	323,190	4,950	11	4	2	33	0	21	1	1	33	1	2	4	2
2	563,726	4,698	11	9	0	32	0	27	1	3	50	1	1	0	0
3	713,254	5,980	12	9	2	54	1	44	1	6	113	4	2	5	2
4	522,519	7,041	9	6	3	26	0	21	0	6	49	1	0	1	1
5	438,317	6,076	10	9	1	31	0	18	0	2	46	0	2	1	1
6	237,240	5,593	14	7	3	19	0	11	0	0	33	0	1	0	0
7	601,660	5,598	11	7	2	32	0	25	0	3	40	0	2	2	2
8	687,079	4,757	10	5	1	51	0	35	1	9	90	4	2	6	5
9	408,904	4,539	12	6	1	25	1	19	0	2	43	0	1	2	1
TOTAL	4,495,889	49,142	100	62	15	303	2	221	4	32	497	11	13	19	17

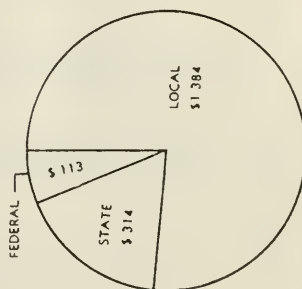
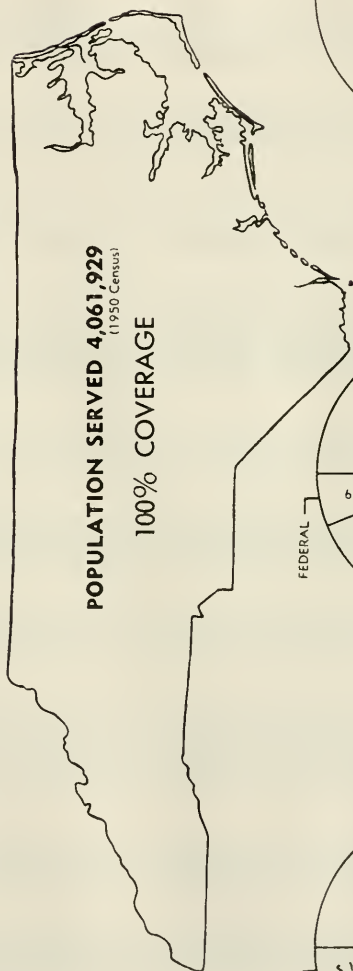
COUNTIES BY DISTRICT

1	2	3	4	5	6	7	8	9
CHEROKEE	POLK	MECKLENBURG	ROBESON	DUPLIN	HALIFAX	GRANVILLE	ROCKINGHAM	ASHE
CLAY	RUTHERFORD	CABARRUS	BLADEN	ONSLow	NORTHAMPTON	VANCE	CASWELL	ALLEGHANY
GRAHAM	MCDOWELL	UNION	COLUMBUS	CARTERET	HERTFORD	WARREN	PERSON	SURRY
MACON	BURKE	STANLY	BRUNSWICK	PAMLICO	BERTIE	FRANKLIN	GUILFORD	STOKES
SWAIN	CALDWELL	DAVIDSON	NEW HANOVER	GRAVEN	GATES	NASH	ALAMANCE	YANCEY
JACKSON	ALEXANDER	ANSON	PENDER	LENOIR	CHOWAN	EDGEcombe	ORANGE	MITCHELL
HAYWOOD	IREDELL	MONTGOMERY	SAMPSON	WAYNE	PERQUIMANS	MARTIN	DURHAM	AVERY
TRANSYLVANIA	CATAWBA	RICHMOND	HOKE	PITT	PASQUOTANK	WILSON	CHATHAM	WATAUGA
MADISON	LINCOLN	MOORE	CUMBERLAND	BEAUFORT	CAMDEN	GREENE	LEE	WILKES
BUNCOMBE	GASTON	ROWAN	SCOTLAND	JONES	CURRITUCK	JOHNSTON	HARNETT	YADKIN
HENDERSON	CLEVELAND	ROWAN	SCOTLAND		DARE	WAKE		FORSYTH
					TYRRELL			DAVIE
					WASHINGTON			
					HYDE			

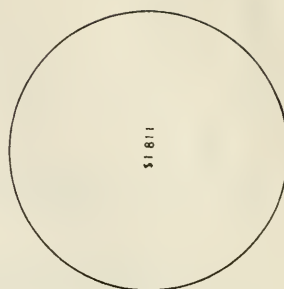
NORTH CAROLINA LOCAL HEALTH SERVICE BUDGET

FISCAL YEAR 1958 - 1959

TOTAL STATE FUNDS INCLUDING MENTAL (REGULAR \$1,132,000 + \$145,000 M.H.)	\$ 1,277,000.00
TOTAL FEDERAL FUNDS (REGULAR FUNDS \$200,000, M.H. \$100,000, SPECIAL \$20,000, CLINIC FEES \$138,639)	\$458,639.00
TOTAL LOCAL FUNDS	\$ 5,619,843.30
TOTAL BUDGET LOCAL HEALTH	\$ 7,355,482.30



COST PER CAPITA



COST PER CAPITA ALL FUNDS

DATA ON FULL TIME COUNTY, DISTRICT, AND CITY HEALTH SERVICES — FISCAL YEAR 1958-59

County, City or District	1950 Population	Date Organized	Total Budget		Source of Funds and Amounts				Part Time			Full Time Personnel						
			Amount	Per Cap.	State Allotment Inc. St. M. H.	Per Cap.	Local Appropriation	Per Cap.	Federal Inc. Fed. M. H. and Other	Per Cap.	H. D.	H. D. Med.	Oth. Dir.	M. H. Dir.	P. H. N.	Sant. H. N.	Clerks and Others	Dent. and Wigs.
Alamance	71,220	1938	\$128,614.00	\$ 1.806	\$ 16,292	\$.229	\$ 107,012.00	\$ 1.502	\$ 5,310	\$.075	1		11s.	5v.	5ed.	10		
Alleg-Ashe-Watauga	48,375	1938-35	49,418.17	1.022	18,185	.376	27,711.17	.573	3,522	.073	1		3	3	3	20		
Alleghany	8,155	1938	9,359.00	1.148	4,514	.554	4,500.00	.552	345	.042			1	1	1			
Ashe	21,878	1938	18,720.00	.856	6,426	.331	10,392.00	.475	1,083	.050			1	1	1			
Ashe	18,342	1935	18,501.72	1.009	6,426	.350	11,181.72	.610	894	.049			1	1	1			
Watauga	18,342	1935	18,501.72	1.009	6,426	.350	11,181.72	.610	894	.049			1	1	2	10		
Anson	26,801	1937	46,657.49	1.742	8,420	.314	35,045.49	1.309	3,192	.119	1		3	3	3	10		
Avery	44,801	1935-44-35	36,979.58	.825	17,712	.395	45,657.58	2.697	2,697	.060			1	1	1			
Avery-Mitchell-Yancey	13,352	1935	10,191.00	.763	5,723	.429	3,850.00	.288	618	.046			1	1	1			
Avery	16,143	1934	11,942.00	.789	5,952	.393	5,300.00	.350	690	.046			1	1	1			
Mitchell	16,306	1935	12,046.00	.739	6,287	.386	5,000.00	.307	759	.046			5	5	2			
Yancey	37,134	1923	52,092.00	1.403	10,290	.277	38,244.00	1.030	3,568	.096			2	2	1	20		
Beaufort	26,439	1934	28,646.70	1.084	8,484	.321	18,669.70	.706	1,493	.057			3	3	1	20		
Beaufort	26,439	1934	28,646.70	1.084	8,484	.321	18,669.70	.706	1,493	.057			3	3	1	20		
Bladen	29,703	1921	38,489.02	1.296	9,627	.324	26,382.02	.905	1,980	.067			2	2	1	10		
Bladen	19,238	1949	25,536.00	1.337	7,266	.377	16,541.00	.860	1,729	.080			2	2	1	10		
Buncombe	124,403	1913	375,440.00	3.018	50,436*	.405	310,623.00	2.497	14,381	.116	1	1	7	18	14v.1.14	200.		
Burke	45,518	1937	61,129.47	1.343	11,870	.261	46,756.47	1.027	2,503	.055	1		3	2	2	20		
Cabarrus	63,783	1919	118,259.95	1.854	16,115*	.253	97,931.95	1.535	4,213	.066	1	1	12s.	3	4	3ed.	20	
Caldwell	43,552	1937	43,800.00	1.010	11,876	.274	29,356.00	.677	2,568	.059	1		3	1	2	20		
Carteret	23,059	1941	34,248.81	1.455	7,599	.330	24,937.81	1.081	1,712	.074	1		2	2	1	10		
Caswell	20,870	1944	26,044.38	1.248	7,347	.352	17,978.38	.828	1,419	.068			2	2	1	10		
Catawba-Jin-Alex	103,807	1938-40-47	140,798.08	1.356	28,759	.277	106,996.08	1.031	5,043	.048	1		12s.	7	6h.	0		
Catawba	61,794	1938	76,842.00	1.244	14,979	.243	59,387.90	.961	2,473	.040			6	3	4			
Lincoln	27,459	1940	37,543.00	1.367	8,348	.304	28,007.00	1.020	1,188	.043			3	2	1			
Alexander	14,454	1947	19,407.00	1.333	5,932	.408	12,784.00	.878	691	.047			3	2	1			
Cherokee-Graham	31,186	1937	40,622.50	1.303	15,216	.488	23,367.50	.749	2,039	.066			2	2	3	10		
Cherokee	18,294	1937	20,328.00	1.111	6,666	.364	12,750.00	.697	912	.050			2	2	1			
Cherokee	6,006	1937	7,439.00	1.247	4,192	.698	3,000.00	.500	297	.049			1	1	1			
Clay	6,886	1937	9,678.00	1.405	4,358	.633	5,000.00	.726	320	.046			1	1	1			
Graham	64,857	1938	76,374.29	1.137	15,574	.242	54,652.29	.849	6,148	.096	1		5	5	3b.	20		
Cleveland	50,631	1921	52,990.00	1.047	14,119	.270	31,341.00	.678	4,530	.090	1		4	2	3	20		
Columbus	48,823	1921	72,965.00	1.495	19,211	.250	56,570.00	1.159	4,184	.086	1		4s.	2	5b.	20		
Graen	96,006	1919	160,694.55	1.667	23,355*	.243	111,492.55	1.193	22,207	.231			3	11s.	5t.	20		
Cumberland	11,606	1938-37	29,977.00	2.583	8,236	.710	21,220.00	1.828	521	.045			2	1	1			
Curtuck-Dare	6,201	1938	13,521.00	2.180	4,227	.682	9,000.00	1.451	291	.047			1	1	1			

[illegible]

DATA ON FULL TIME COUNTY, DISTRICT, AND CITY HEALTH SERVICES — FISCAL YEAR 1958-59

County, City or District	1950 Population	Date Organized	Total Budget		Source of Funds and Amounts					Part Time		Full Time Personnel				
			Amount	Per Cap.	State Allotment Inc. St. M. H.	Per Cap.	Local Appropriation	Federal Inc. Fed. M. H. M. and I. and Other	Per Cap.	H. D.	H. D.	Oth. Med. Dir.	M. H.	P. H. N.	Sant. Clerks and Others	Dent. Wks.
Northampton	28,432	1917	39,934.48	1.405	9.022	.317	28,108.48	.989	2,804	1	1		3	3	1	20
Onslow	42,047	1941	54,208.14	1.289	10.320	.245	40,684.14	.968	3,204	1	1		4	4	2	10
Orange-Person-C-Lee	107,710	1935-37-46	183,112.94	1.700	40.007*	.371	114,030.94	1.059	29,075	1	1	1	16s.	16s.	5	50
Orange	34,435	1935	37,535.00	1.090	8.764	.254	27,500.00	.799	1,271				9	9	2	4
Person	24,361	1935	34,413.00	1.413	8.123	.334	25,000.00	1.026	1,290				2	2	1	1
Chatham	25,392	1937	27,460.00	1.081	8.240	.324	18,000.00	.709	1,220				2	2	1	1
Lee	23,522	1946	29,064.00	1.235	7.880	.335	20,000.00	.850	1,184				2	2	1	1
Pamlico	9,993	1949	17,830.00	1.784	5.036	.504	11,955.00	1.196	839				3	3	1	10
Pasq-Perq-Camden-Chow.	51,712	1942-43-37	105,185.82	2.034	22.272	.431	59,432.82	1.149	23,481	1	1		3	6	2	7b.
Pasquotank	24,347	1942	35,128.00	1.443	7.761	.319	26,152.00	1.074	1,245				3	3	4	
Perquimans	9,602	1943	15,243.70	1.588	4.921	.513	9,823.70	1.023	499				1	1	1	1
Camden	5,223	1943	11,153.55	1.366	4.088	.783	6,784.55	1.299	281				1	1	1	1
Chowan	12,540	1937	17,553.30	1.400	5.052	.439	11,393.30	.908	658				1	1	1	1
Pender	18,423	1941	28,452.00	1.544	7.067	.384	19,788.00	1.074	1,597	1			2	2	1	1
Pitt	63,789	1917	129,405.00	2.029	16.246	.255	80,876.00	1.268	32,283				3	10s.	3	5
Randolph	50,804	1927	61,262.50	1.206	13.184*	.260	44,908.50	.884	3,170	1	1		3	3	5	10
Richmond	39,597	1924	44,484.00	1.123	10.964	.277	31,113.00	.786	2,407	1			3	3	2	2
Robeson	87,769	1912	91,965.00	1.048	22.404	.255	61,957.00	.706	7,604				6s.	3	2	20
Rockingham	64,816	1940	81,732.03	1.261	14.663	.226	63,685.03	.983	3,384	1			7	7	3	3
Rowan	75,410	1918	105,470.77	1.399	17.394*	.231	83,524.77	1.108	4,552				7s.	3	3	3ed.
Rutherford-Polk	57,983	1924-38	62,503.00	1.078	17.020	.294	36,771.00	.634	8,712	1	1		4	4	3	20
Rutherford	46,356	1924	38,859.91	.838	11.773	.254	25,188.91	.543	1,898				3	3	2	10
Polk	11,627	1938	12,028.48	1.034	5.247	.451	6,301.48	.542	480				1	1	1	1
Sampson	49,780	1918	57,124.82	1.148	13.053	.262	39,953.82	.803	4,118	1			5s.	5	2	2
Scotland	26,336	1943	44,793.00	1.701	8.829	.335	32,669.00	1.241	3,285		1	1	4	4	1	20
Stanly	37,130	1937	41,512.35	1.126	10.201	.275	30,089.35	.810	1,522	1	1		3	3	1	2
Stokes	21,520	1931	34,449.00	1.601	7.062	.328	25,755.00	1.197	1,632	1			5	5	1	10
Surry	45,593	1919	74,738.45	1.639	11.871	.260	58,748.45	1.289	4,119	1	1		5	5	1	3
Tyrell-Washington	18,228	1937	29,291.28	1.607	9.860	.591	18,236.28	1.000	1,195				2	2	1	1
Tyrell	5,048	1937	8,944.16	1.772	4.026	.798	4,644.16	.920	274				1	1	1	1
Washington	13,180	1937	18,700.60	1.419	5.834	.443	12,125.60	.920	741				1	1	1	1
Union	42,034	1938	52,334.87	1.245	11.216	.267	38,494.87	.916	2,624	1	1		3	3	1	2
Vance	32,101	1920	28,462.71	.887	9.314	.290	16,074.71	.501	3,074				2	2	1	10
Wake	136,450	1918	275,149.03	2.016	28.435	.208	204,398.03	1.498	42,316	1	1	1	6	20s.	6	9d.b.
Warren	23,539	1945	24,312.72	1.054	8.043	.342	15,038.72	1.639	1,731	1			2	2	1	1
Wayne	64,267	1920	100,162.30	1.559	16.038	.250	79,466.30	1.237	4,658	1	1		8s.	8s.	4	7t.

Wilkes	45,243	1920	34,374.94	.780	11,413	.252	18,577.94	.411	4,384	.097	1	2	1	1	0
Wilson	54,506	1916	83,728.54	1.536	13,967	.256	65,458.54	1.201	4,303	.079	1	6	2	3	10

Total Counties	3,900,190		6,535,959.24	1.676	1,196,410	.307	4,895,623.24	1.255	443,926	.114	13	55	5	44	463	210	281	1290
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Charlotte	134,042	1918	721,058.06	5.380	63,266*	.472	619,372.06	4.845	8,420	.063	1	2	11	45	27	30	201.
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Rocky Mount	27,697		87,419.00	8.156	6,278	.227	74,848.00	2.702	6,293	.227				s. v.l. ed.	5s.	2	5L	20
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Total Cities	161,739		808,477.06	4.999	69,544	.430	724,220.06	4.478	14,713	.091	1	2	11	50	29	35	40
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Combined Total	4,061,929		7,344,436.30	1.808	1,265,954	.312	5,619,843.30	1.383	458,639	.113	13	56	7	55	513	239	316	1240
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Recaptured and unbudgeted funds			11,046.00		11,046													
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Grand Total	4,061,929		\$7,355,482.30	\$1.811	\$1,277,000**	\$.314	\$5,619,843.30***	\$1.384	\$458,039****	\$.113	13	56	7	55	513	239	316	1240
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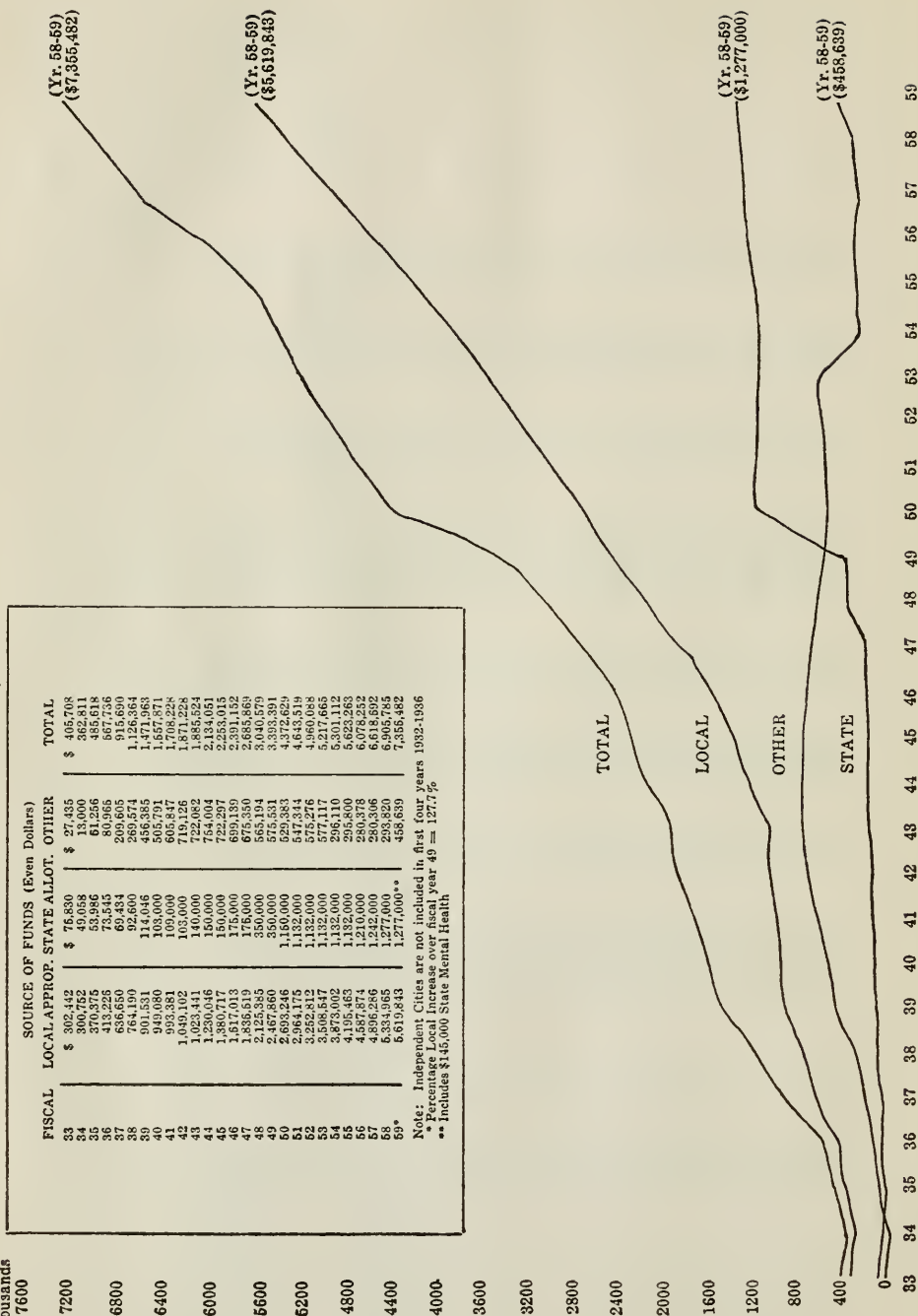
*Includes funds for Training Centers (Twelve Centers—One Co. Lab. Total \$25,400)
 **State Mental Health Funds (\$145,000) included: Buncombe, Durham, Forsyth, Guilford, Charlotte
 ***Local Appropriation includes balance (brought forward) of \$258,817.94 from fiscal year 1957-58
 ****Federal Mental Health Funds (\$100,000) included: Cumberland, Forsyth, New Hanover, Pasq-Perq C.-C. Dist, Pitt, Wake (Clinic Fees \$138,639 included)
 Regular Federal funds allotted to Health Departments = \$200,000.
 The breakdown of individual counties in the Districts does not include any special funds, extra funds or balances.
 Note: If estimated population of North Carolina for 1959 (4,515,466) were used, the per capita cost would be as follows:

State funds	=	\$1,277,000
Local funds	=	5,619,843.30
Federal funds	=	458,639.
Total funds	=	7,355,482.30

State per capita	=	\$.283
Local per capita	=	1.245
Federal per capita	=	.101
Total per capita, all funds	=	1.629

dn — Public Health Nursing Director	M. H. — Mental Health Personnel
ds — Director of Sanitation Activities	Ex — Exclusive of
s — Public Health Nursing Supervisor	C — Charlotte
f — Veterinarian	R. M. — Rocky Mount
l — Public Health Investigator	

SOURCE OF FUNDS FOR LOCAL HEALTH DEPARTMENTS IN NORTH CAROLINA 1933-1959

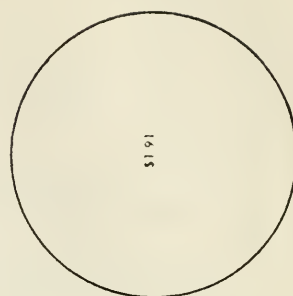
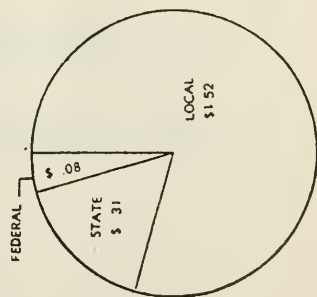
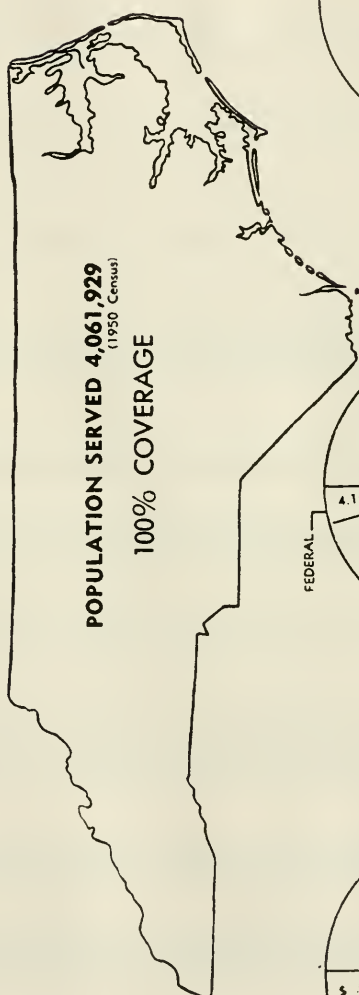
Thousands
7600

83 84 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59

NORTH CAROLINA LOCAL HEALTH SERVICE BUDGET

FISCAL YEAR 1959-1960

TOTAL STATE FUNDS INCLUDING MENTAL HEALTH (REGULAR \$1,132,000 + \$145,000 M.H.) _____ \$ 1,277,000.00
 TOTAL FEDERAL FUNDS (REGULAR FUNDS \$200,000, MENTAL HEALTH \$109,225, SPECIAL \$9,880) _____ \$ 319,105.00
 TOTAL LOCAL FUNDS _____ \$ 6,157,105.40
 TOTAL BUDGET LOCAL HEALTH _____ \$ 7,753,210.40



COST PER CAPITA

SOURCE OF FUNDS

COST PER CAPITA ALL FUNDS

DATA ON FULL TIME COUNTY, DISTRICT, AND CITY HEALTH SERVICES — FISCAL YEAR 1959-60

County, City or District	1950 Population	Date Organized	Total Budget		Source of Funds and Amounts					Part Time		Full Time Personnel					
			Amount	Per Cap.	State Allotment Inc. St. M. H.	Per Cap.	Local Appropriation	Per Cap.	Federal Inc. Fed M. H. and Other	Per Cap.	H. D.	H. D.	M. H.	P. N.	Sant. H.	Clerks and Others	Dent. Wks.
Alamance	71,220	1938	\$138,078.00	\$ 1.939	\$ 15,752	\$.221	\$ 119,482.00	\$ 1.678	\$ 2,844	\$.040	1	SAW IN	11s.	6v.	6ed	10	
Alle-Ashe-Watauga	48,375	1938-35	48,776.29	1.008	18,033	.373	28,548.29	.613	331	.041			1	1	1	1	
Alleghany	8,135	1938	9,716.00	1.191	4,383	.537	5,002.00	.552	1,024	.047			1	1	1	1	
Ashe	21,878	1938	19,961.00	.913	6,869	.314	12,068.00	.719	840	.046			1	1	1	1	
Watauga	18,342	1935	20,154.00	1.099	6,120	.334	13,194.00	.719	1,475	.055	1		3	1	2	10	
Anson	26,781	1937	48,937.04	1.827	8,653	.323	38,509.04	1.449	2,000	.044			3	1	3	10	
Avery-Mitchell-Yancey	44,801	1935-44-35	36,526.53	.815	17,022	.380	17,504.53	.391	2,000	.045			1	1	1	1	
Avery	12,352	1935	9,979.00	.747	5,528	.414	3,850.00	.288	601	.015			1	1	1	1	
Mitchell	15,143	1944	12,654.00	.836	5,722	.378	6,250.00	.413	682	.045			1	1	1	1	
Yancey	16,306	1935	12,339.00	.757	6,022	.369	5,600.00	.344	717	.044			1	1	1	1	
Beaufort	37,134	1923	50,431.00	1.358	9,806	.264	38,411.00	1.034	2,214	.060			5	1	3	0	
Bertie	26,439	1934	28,305.15	1.071	8,139	.308	18,690.15	.707	1,476	.056	1		2	1	1	20	
Bladen	29,703	1921	41,441.79	1.395	9,159	.308	30,566.79	1.029	1,716	.058			3	2	1	20	
Brunswick	19,238	1949	31,027.00	1.613	9,541	.496	20,290.00	1.055	1,196	.062			2	1	2	10	
Buncombe (M. H.)	124,403	1913	387,178.00	3.112	37,704*	.303	334,121.00	2.686	15,353	.123	1	1	7	18	13v.i. 14	20d.	
Burke	45,518	1937	62,754.39	1.379	12,405	.273	48,300.39	1.061	2,049	.045	1		4	2	2	20	
Calhoun	63,783	1919	119,384.73	1.872	16,593*	.260	100,303.73	1.573	2,488	.039	1		11s.	4	5ed.	20	
Caldwell	43,352	1937	43,755.00	1.009	11,783	.272	29,910.00	1.690	2,062	.047	1		3	1	2	10	
Carroll	23,059	1941	37,431.02	1.623	8,084	.350	28,177.02	1.222	1,170	.051	1		3	1	2	10	
Catawba-Lin-Alex	103,807	1938-40-47	135,236.52	1.476	29,491	.284	119,183.52	1.148	4,562	.044	1		12s.	7	6b.	0	
Catawba	61,794	1938	85,013.00	1.376	14,512	.235	67,818.00	1.097	2,683	.044			6	3	4		
Lincoln	27,459	1940	40,414.00	1.472	8,039	.293	31,176.00	1.135	1,199	.043			3	2	1		
Alexander	14,554	1947	22,759.00	1.564	5,728	.394	16,351.00	1.123	60	.047			3	2	1		
Cherokee-Clay-Graham	31,186	1937	42,843.18	1.374	15,238	.489	26,098.18	.837	1,507	.048			4	2	3	10	
Cherokee	18,294	1937	20,012.00	1.094	6,356	.347	12,750.00	.697	906	.050			2	1	1		
Clay	6,006	1937	7,365.00	1.226	4,081	.679	3,000.00	.500	284	.047			1	1	1		
Graham	6,886	1937	9,599.00	1.394	4,842	.622	5,000.00	.726	317	.046			1	1	1		
Cleveland	64,357	1938	77,298.47	1.201	14,845	.231	59,599.47	.926	2,854	.044	1		5	3	4b.	20	
Columbus	50,621	1921	55,160.00	1.090	13,404	.265	38,744.00	.765	3,012	.060	1		4s.	2	3	20	
Craven	48,823	1921	74,459.82	1.525	12,976	.268	58,681.82	1.202	2,802	.037	1		11s.	61.	5t.	20	
Cumberland (M. H.)	96,006	1919	172,102.64	1.792	31,705*	.330	126,744.64	1.320	13,653	.142	1		3	2	1	10	
Currituck-Dare	11,600	1938-37	34,992.53	3.015	14,922	1.286	19,526.53	1.682	544	.047	1		2	1	2	10	
Currituck	6,201	1938	13,450.00	2.169	4,147	.669	9,000.00	1.451	303	.049			1	1	1		
Dare	5,405	1937	13,434.00	2.485	3,953	.731	9,240.00	1.710	241	.044			1	1	1		

Davidson	62,244	1917	82,339.00	1,323	14,861	239	64,784.00	1,041	2,694	.043	1	7	3	4b.	10
Davie-Yadkin	37,553	1938-31	48,527.01	1,292	13,063	348	33,917.01	.903	1,547	.041	1	4	1	2	20
Davle	15,420	1938	22,424.19	1,454	5,669	368	16,132.19	1,046	623	.040	1	2	1	10	10
Yadkin	22,133	1931	24,200.19	1,094	6,884	311	16,392.19	.741	924	.042	1	2	1	1	10
Duplin	41,074	1934	49,965.00	1,217	11,077	.270	36,595.00	.891	2,294	.056	1	5	1	2	20
Durham (M. H.)	101,639	1913	303,241.13	2,984	49,834*	.490	239,115.13	2,353	14,292	.141	8	17	10i.	13b.	20d.
Edgecombe (Ex. R. M.)	38,722	1919	65,378.67	1,689	11,187	.289	52,030.67	1,344	2,161	.056	1	5	2	4	20
Forsyth (M. H.)	146,135	1913	359,791.00	2,462	43,289*	.296	207,526.00	2,036	18,976	.130	1	6	23s.	12	20d.
Franklin	31,341	1930	39,034.30	1,245	8,847	.282	28,449.30	.908	1,738	.055	1	3	i.	ed.	20
Gaston (M. H.)	110,836	1928	256,953.00	2,318	27,558*	.249	222,953.00	2,011	6,442	.058	1	1	15	11	13
Granville	31,793	1919	47,482.19	1,493	9,106	.286	36,695.19	1,154	1,681	.053	1	4	1	2	20
Greene	18,024	1937	32,563.60	1,807	6,483	.360	25,097.60	1,392	983	.055	1	3	1	2	10
Guilford (M. H.)	191,057	1911	605,950.00	3,172	51,183*	.268	536,437.00	2,808	18,330	.096	1	6	38	17v.	25
Halifax (M. H.)	58,377	1919	115,448.85	1,978	17,422*	.299	92,866.85	1,591	5,160	.088	1	10	3	6b.	20
Harnett	47,605	1936	54,440.00	1,144	12,218	.257	39,697.00	.834	2,525	.053	1	5	1	2	20
Haywood	37,631	1934	53,863.00	1,431	10,322*	.274	42,054.00	1,118	1,487	.039	1	3	2	3b.	10
Henderson	30,921	1947	37,782.24	1,222	8,450	.273	27,963.24	.904	1,389	.045	1	2	1	1	0
Hertford-Gates	31,008	1936-40	46,961.78	1,515	12,241	.395	32,881.78	1,061	1,839	.059	1	4	1	2	20
Hertford	21,452	1936	27,321.34	1,274	7,372	.344	18,673.34	.871	1,270	.059	1	2	1	1	10
Gates	9,553	1940	14,777.66	1,546	4,869	.310	9,333.66	.377	569	.039	1	2	1	1	10
Hoke	15,756	1948	27,167.40	1,724	6,613	.430	19,496.40	1,237	1,058	.067	1	2	1	1	10
Hyde	6,479	1937	13,624.30	2,103	5,687	.878	7,598.30	1,173	339	.052	1	1	1	1	10
Jacobs	56,303	1942	67,444.47	1,198	13,351	.237	51,486.47	.915	2,607	.046	1	5	2	3d.	20
Jackson-Macon-Swain	45,365	1934-36-34	60,858.05	1,342	17,508	.386	41,344.05	.912	2,006	.044	1	3	3	3	30
Jackson	19,261	1934	19,916.09	1,034	6,208	.322	12,861.09	.668	847	.044	1	1	1	1	10
Macon	16,174	1936	18,499.83	1,144	5,829	.360	11,966.83	.740	704	.044	1	1	1	1	10
Swain	9,921	1934	14,983.94	1,510	4,642	.468	9,856.94	.996	455	.046	1	1	1	1	10
Johnston	65,906	1937	49,375.20	.749	15,758	.289	30,411.20	.461	3,206	.049	1	5s.	2	2	20
Jones	11,004	1949	15,527.00	1,411	5,180	.471	9,732.00	.884	615	.056	1	1	1	1	10
Lenoir	45,953	1917	69,750.00	1,518	12,995	.283	53,738.00	1,169	3,017	.066	1	5	2	3	20
McDowell	25,720	1945	34,726.00	1,350	8,303	.323	25,314.00	.984	1,109	.041	1	2	1	1	20
Madison	20,522	1949	24,226.00	1,180	6,314	.308	17,060.00	.831	852	.041	1	3	2	1	20
Martin	27,358	1917	46,607.00	1,668	9,197	.329	35,742.00	1,279	1,668	.060	1	8	5	1	20d.
Mecklenburg (Ex. C.)	17,010	1918	187,824.00	2,381	15,919	.253	168,172.00	2,669	3,733	.059	1	19s.	2	1	20
Montgomery	63,260	1942	25,050.95	1,451	6,376	.369	17,799.95	1,031	875	\$.051	1	2	1	2	20
Moore	33,129	1928	41,790.00	1,264	9,299	.231	31,108.00	.939	1,469	.044	1	4	2	2	20
Nash (Ex. R. M.)	45,134	1915	61,790.40	1,369	12,657	.281	46,814.40	1,037	2,319	.051	1	4	2	2	20
New Hanover (M. H.)	33,272	1913	185,107.57	2,926	17,891	.283	161,222.57	2,548	5,994	.095	1	1	14s.	5	12b.t.
Northampton	28,432	1917	43,503.07	1,532	9,297	.324	32,752.07	1,152	1,584	.056	1	3	1	1	20
Onslow	42,047	1941	55,152.85	1,312	11,148	.265	41,371.85	.984	2,633	.063	1	4	2	2	10
Orange-P-C-L-Caswell	128,580	1935-37-44-46	224,584.12	1,747	49,591*	.386	168,882.12	1,236	16,111	.125	1	2	17s.	5	7

DATA ON FULL TIME COUNTY, DISTRICT, AND CITY HEALTH SERVICES — FISCAL YEAR 1959-60

County, City or District	1950 Population	Date Organized	Total Budget		Source of Funds and Amounts				Part Time		Full Time Personnel			
			Amount	Per Cap.	State Allotment Inc. St. M. H.	Per Cap.	Local Appropriation	Per Cap.	Federal Inc. Fed. M. H. and Other	H. D.	H. D.	M. P. H. N.	Sant. H. N.	Clerks and Wks. Others
Orange	34,435	1935	41,394.00	1.202	8,490	.246	31,500.00	.915	1,404			9	2	3
Person	24,361	1935	36,053.00	1.486	7,773	.319	27,000.00	1.180	.053			2	1	1
Chatham	25,392	1937	30,122.00	1.186	7,902	.311	21,000.00	.827	1,220			2	1	1
Lee	23,522	1946	31,345.00	1.332	7,689	.327	22,400.00	.952	1,256			2	1	1
Caswell	20,870	1944	22,466.00	1.076	6,995	.335	14,400.00	.690	1,071			2	1	1
Pamlico	9,993	1949	23,140.00	2.316	7,402	.741	15,190.00	1.320	.055			2	1	1
Paso-Pero-C-Chow. (M. H.)	51,712	1942-43-37	106,210.90	2.054	30,244	.585	65,707.90	1.271	10,259			2	2	7b.
Pasquotank	24,347	1942	36,654.00	1.505	7,431	.305	27,938.00	1.147	1,285			3	4	
Perquimans	9,602	1943	15,846.70	1.650	4,784	.498	10,545.70	1.098	517			1	1	1
Canden	5,223	1943	10,223.55	1.957	4,030	.472	5,914.55	1.132	279			1	1	1
Chowan	12,940	1937	20,342.30	1.622	5,359	.427	14,305.30	1.141	678			1	1	1
Pender	18,423	1941	29,451.00	1.598	7,026	.381	21,353.00	1.159	1,072			2	1	1
Fitt (M. H.)	63,789	1917	141,827.61	2.223	26,716	.419	101,717.61	1.594	13,394			2	9	3
Randolph	50,804	1927	67,386.62	1.326	12,766*	.251	52,502.62	1.033	2,118			4	2	5
Richmond	39,597	1924	55,566.00	1.403	10,617	.268	43,016.00	1.086	1,933			3	2	10
Robeson	87,769	1912	94,172.00	1.073	22,331	.255	66,119.00	.753	5,722			3	2	20
Rockingham	64,816	1940	88,159.33	1.360	14,330	.221	71,090.33	1.097	2,739			7	3	5ed.
Rowan (M. H.)	75,410	1918	121,011.13	1.605	20,585*	.273	94,510.13	1.253	5,916			2	9s.	4
Rutherford-Polk	57,983	1924-38	56,250.34	.970	16,272	.280	37,499.34	.647	2,479			5	3	20
Rutherford	46,856	1924	40,134.00	.866	11,171	.241	26,989.00	.582	1,971			3	2	2
Polk	11,627	1938	12,952.00	1.114	5,101	.439	7,346.00	.632	505			2	1	1
Sampson	49,780	1918	57,376.77	1.153	12,333	.248	42,158.77	.847	2,885			5s.	2	2
Scotland	26,836	1943	46,224.86	1.755	8,555	.325	35,981.86	1.366	1,688			4	1	1
Stanly	37,130	1937	43,118.82	1.161	9,780	.263	31,779.82	.856	1,559			3	1	2
Stokes	21,320	1931	33,410.00	1.533	6,725	.313	25,868.00	1.202	817			2	1	1
Surry	45,593	1919	74,098.00	1.625	12,302	.270	59,902.00	1.314	1,894			5	1	10
Transylvania	15,194	1937	22,564.00	1.485	5,999	.395	15,942.00	1.049	623			1	1	3
Tyrrell-Washington	18,228	1937	30,752.30	1.687	10,053	.551	19,667.30	1.079	1,322			2	1	1
Tyrrell	5,048	1937	8,856.16	1.754	3,943	.781	4,644.16	.920	269			1	1	2
Washington	13,180	1937	18,988.60	1.441	5,700	.433	12,525.60	.950	763			1	1	1
Union	42,034	1938	55,466.15	1.320	10,963	.261	42,272.15	1.006	2,231			3	1	2
Vance	32,101	1920	35,640.71	1.110	8,924	.278	24,937.71	.777	1,779			2	1	1
Wake (M. H.)	136,450	1918	292,824.91	2.146	41,954	.307	230,806.91	1.692	20,064			8	7	9db.
Warren	23,539	1945	23,560.45	1.001	7,620	.324	14,621.45	.621	1,319			1	1	1
Wayne	64,267	1920	109,087.08	1.698	15,505	.241	89,883.08	1.339	3,699			8s.	4	6

Wilkes	45,243	1920	711	11,194	.247	18,789.69	.415	2,199	.049		2	1	1	0
Wilson (M. H.)	54,506	1916	2,375	25,790	.473	19,188.72	1,636	14,490	.266	1	3	6	2	3
Total Counties	3,900,190		1,766	1,211,375	.311	5,371,305.64	1,377	304,364	.078	14	50	4	49	474
										14	50	4	218	282
														1192
Charlotte (M. H.)	134,042	1918	5,785	54,740*	.408	707,690.76	5,279	13,026	.098			2	12	48
														26
														31
Rocky Mount	27,697		3,099	5,942	.214	78,179.00	2,823	1,715	.062					5
														2
														56
Total Cities	161,739		5,325	60,682	.375	785,799.76	4,859	14,741	.091	0	0	2	12	53
														28
														36
														40
Combined Total	4,061,929		1,908	1,272,057	.313	6,157,105.40	1,516	319,105	.079	14	50	6	61	527
														246
														318
														1232
Recaptured and unbudgeted funds			4,943.00	4,943										
Grand Total	4,061,929		\$7,753,210.40	\$1,277,000** \$.314	\$6,157,105.40***	\$1,516	\$319,105****	\$.079	14	50	6	61	527	246
														318
														1232

*Includes funds for Training Centers (Twelve Centers-One Co. Lab. Total \$25,400)

**Share Mental Health Funds (\$145,000) included (see Department—M. H.)

***Local Appropriation includes balance (brought forward) of \$251,839.33 from fiscal year 1958-59

****Federal Mental Health Funds (\$109,225) included (See Department—M. H.)

Regular Federal funds allocated to Health Departments (\$200,000 + special \$9880)

The Local breakdown of individual counties in the Districts does not include any special funds, extra funds or balances.

Note: If estimated population of North Carolina for 1960 (4,564,497) were used, the per capita cost would be as follows:

State funds	=	\$1,277,000
Local funds	=	6,157,105.40
Federal funds	=	319,105
Total funds	=	7,753,210.40

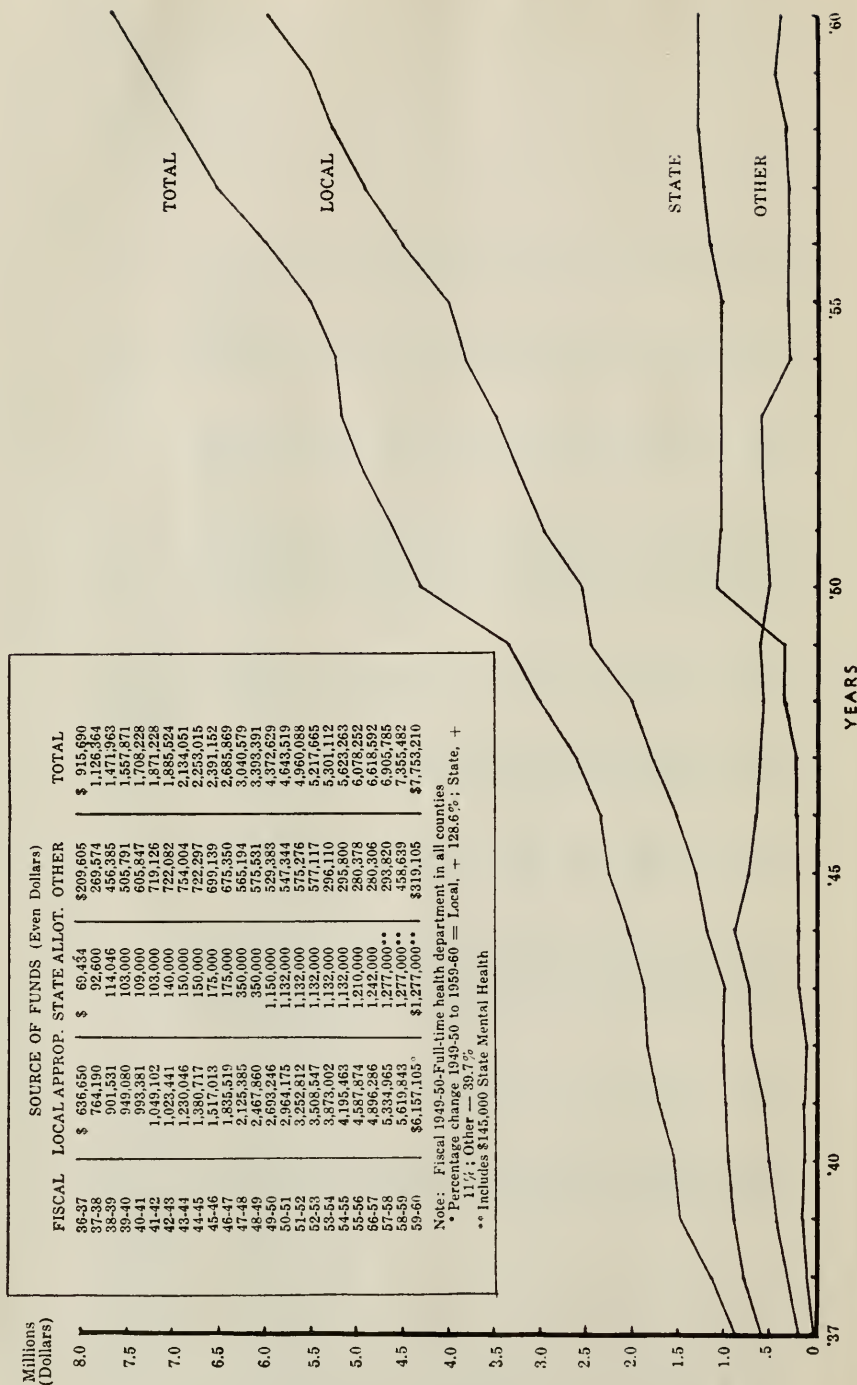
dn — Public Health Nursing Director
ds — Director of Sanitation Activities
s — Public Health Nursing Supervisor
v — Veterinarian
i — Public Health Investigator

b — Bacteriologist
d — Dentist
ed — Health Educator
n — Nutritionist
t — Technician

M. H. — Mental Health Personnel
Ex — Exclusive of
C — Charlotte
R. M. — Rocky Mount

=	State per capita	\$.280
=	Local per capita	1.349
=	Federal per capita	.070
=	Total per capita, all funds	1.699

SOURCES OF FUNDS FOR LOCAL HEALTH DEPARTMENT IN NORTH CAROLINA 1937-1960



PERSONAL HEALTH DIVISION

July 1958-June 1960

Maternal and Child Health Section

The activities of the Maternal and Child Health Section can be divided into direct medical services, training programs, and special programs.

There were 65,127 prenatal visits and 97,196 visits to the infant and preschool clinics.

The child evaluation clinics saw approximately 147 children during the two-year period.

The Maternal and Child Health Section supplied these clinics with health education literature in addition to large quantities of basic medications which are utilized in the clinics.

Counties received continued support in the form of items of equipment for clinic usage.

The professional fees for these clinics are paid through the local health departments by the Maternal and Child Health Section.

The premature care program provides the cost of hospitalization and professional fees for approximately four percent of all the prematures born in North Carolina. This care, however, is rendered to approximately 33% of the smaller premature infants which are born in the state.

During the biennium a total of 733 prematures were supported by the program at a total cost of \$495,000. The cost of this program has increased yearly and in 1959 the average cost of the care of each infant was \$704. In addition to providing direct hospital cost, this program also provides certain expensive equipment for utilization in the premature centers.

The Maternal and Child Health Section provides two pediatric nurse consultants, one maternity nurse consultant, an obstetric physician consultant, all of whom are available for consultation to the individual county health departments as well as the hospitals throughout the state and other agencies. The services primarily concern the standards of care being rendered in the various public health clinics, the quality of nursing care given in the premature units, as well as in the other nurseries in any of the hospitals throughout the state. Other agencies provided consultation include those concerned with day care.

Considerable emphasis has been laid upon the training program for professional personnel at all levels. Training for graduate nurses in the care of premature infants as well as those infants of normal weight has been continued at Duke University. The nurses trained in this program are followed in the field by one of the nurse consultants from the Maternal and Child Health Section, as well as the nurse in charge of training at Duke.

An annual meeting has been held for the past two years directed toward training nurses in the field of maternal and child health. The meetings have been open to hospital nurses, as well as those nurses from the various health departments. Basically, the purpose of the meetings is to train the nurses in the coordination of their separate but related activities.

In addition to this the health department nurses have been provided four in-service training programs in maternity and child health. These conferences are given in the local areas and usually cover several months in duration.

The annual Midwife Institute at Fayetteville has continued. The number of registrants applying for this institute has noticeably dropped in recent years, and it is anticipated that such conferences may be held every other year in the future.

The Maternal and Child Health Section provides a postgraduate course for physicians held at the Bowman Gray School of Medicine, utilizing their staff. During the past two years this has been attended by 60 physicians in the state.

An orientation program developed at Caswell School several years ago has continued. Eighty eight nurses and 78 social workers have participated in these orientation programs designed to acquaint these workers with the special problems of the families of children with mental retardation. Plans are being made to carry out similar orientation courses in the O'Berry School in Goldsboro.

The increasing complexity of pediatric nursing problems made it advisable to carry out a pilot study in specialized postgraduate training in this field. Accordingly, the first individual completed this training in 1960 to remain at Duke University Hospital, serving in the dual capacity of an instructor, as well as a supervisory nurse.

A number of special programs which have been in existence prior to this year were continued.

The Maternal and Child Health Section continued to lend financial support to the Committee on Maternal Welfare of the State Medical Society by supplying funds to assist the Public Health Statistics Section in their search of records.

The Section also assisted the Child Health Committee of the State Medical Society in its study of neonatal deaths. The fetal and neonatal mortality study begun six years ago has continued in addition to the fetal and neonatal deaths previously recorded. All premature infants were included in the study in an effort to further evaluate the factors associated with prematurity.

The Section continued to support the annual hospital reports of fetal and neonatal deaths which are sent to each hospital in the state and include a summary of all of their live births in addition to all the fetal and neonatal deaths. This is done in a coded form so that the individual hospital is aware only of its own identification. This has been received very successfully and has proven very useful.

During the past year the Wake County Premature Study was nearly completed and the first report on the data obtained was presented to the State Medical Society in May 1960.

Crippled Children's Section

Funds received from the Children's Bureau for the fiscal year 1958-59 were adequate to cover the support of service requested. Early in the last quarter 1959-60, it became apparent that funds would not be adequate and

the Section received an additional \$21,000 from the Children's Bureau. All funds for the year had been encumbered by June 30, 1960 but through failure to hospitalize or refusal of hospitalization authorized, disencumbrances have assumed a formidable figure. Final accounting will not be possible until about the middle of August when we presume that all service authorized and not used will be known and all bills for the fiscal year processed for payment.

For the fiscal year 1960-61, Federal grants-in-aid have been increased to \$770,558. This will permit of our increasing the income brackets which are used by welfare as standards for our support of the medically indigent to reflect somewhat the increase in living costs in the past decade; it will also allow us to remove the age limitation for initial presentation of beneficiaries to the rheumatic fever and speech and hearing programs.

With the prospective increase in the number of children served, mounting costs of heart surgery, the graft treatment of burns, and the annual increase in costs of hospitalization, it is problematical that we shall be able to initiate a new program. Our annual state appropriation was increased in 1959 by \$25,000 which is earmarked (with the initial \$25,000 so appropriated) for the use of a facility which is not under state control. Our appropriation totals \$118,000 of which there is available to the Section but \$66,000 for service for handicapped children throughout the state.

No new programs have been initiated during this biennium, the yearly increase in Federal funds being used to maintain the programs already in effect. In the spring of 1959 the Spruce Pine orthopedic clinic was discontinued and its function continued, alternately, in the health departments of Yancey (Burnsville), Mitchell (Bakersville) and Avery (Newland).

There was expended for training during this period \$3677 which included the support of a year in the School of Physical Therapy at Duke of a nurse who is now employed as a physical therapist by the section, the support in the same facility since September 1959 of a graduate student, and that of special training at New York University of a local health department nurse in rehabilitation techniques for the handicapped.

The section is operating with a force of eight ancillary (technical) personnel. We are short two advisory and consultant nurses and must add one physical therapist to those already employed. During the biennium four camping activities for handicapped children were supported with the technical assistance of our ancillary personnel. Eight periodic bulletins, numbers 15 to 22, were published and distributed.

Statistical Data Calendar Year 1959

	Number of children	Number of visits, days care or services
Clinic Service (Orth., R. F., S & H)	13,303	25,831
Hospitalized	1,736 (2072 hospitalizations)	16,607
Office & Private Clinics	356	3,286
Appliances & Prosthesis	877	1,161
Total number (unduplicated services)	14,254	
Prevailing Entities:		
1. Congenital defects not specifically coded		1,796
2. Disease of bones and organs of movement not congenital		1,701
3. Flat foot—congenital and acquired		1,629
4. Club foot		1,350

5. Residuals of Poliomyelitis	1,319
6. Diseases and handicapping conditions not otherwise coded	916
7. Rheumatic Fever and Rheumatic Heart Disease	805
8. Cerebral Palsy	786
9. Accidents, poisonings, violence	709
10. Congenital anomalies, heart and great vessels	361
11. Cleft lip and palate	328
12. Scoliosis—other than congenital, polio and T. B.	286
13. Burns—graft treatment of	233
14. Diseases of nervous system not specifically coded	171
15. Birth injuries except cerebral palsy and epilepsy	139

Hospital Service authorized	3,063
Total visits orthopedic clinics	(230 of these adults not recorded on statistical cards) 23,134

Total visits rheumatic fever clinics	2,097
Total visits speech and hearing clinics	830

Classification, rheumatic fever patients:

1. Rheumatic fever active, with or without rheumatic heart disease	135
2. Rheumatic fever inactive, without rheumatic heart disease	363
3. Rheumatic fever inactive, with rheumatic heart disease	307

Amputees:

1. For Disease	15
2. Congenital	35
3. Traumatic	50

Chronic Disease Section

The Section Chief resigned as of December 31, 1959, to go on government service in the Far East. In January, 1960, the Chronic Disease Section was moved to Personal Health Division and placed under Section Chief for Cancer and Heart, with Radiation Control activities moved to the Section of Occupational Health in Epidemiology Division.

In the 18 months of 1958-59, activities and studies started in the previous year were continued. The tuberculosis surveys in Wilson and Pamlico Counties were completed except for the fifth year follow-up in Pamlico. Report on these studies were made to the American Public Health Association meeting of 1959. Other technical activities in tuberculosis studies or surveys have been moved to the Tuberculosis Section. The unique study of tuberculosis incidence in Pamlico will be carried to completion in 1960-61.

In 1960 the work has been concentrated on development of the Diabetes Program, and on plans for the Governor's Conference on Aging in July and the coming activities in that field.

The diabetes program has set out to make available to every County Health Department requesting it, the equipment and materials to carry out a continuing survey of glucose blood levels in individuals and groups of probable high incidence. In the 100 counties 25 health directors reported interest in carrying out such surveys, including at least five counties with extensive programs already underway. In these counties the Glover-Edwards glucose test kit is provided free, together with the chemicals necessary to carry out the tests. Demonstration in the use of these materials is made on schedule in these counties and follow up visits where needed. Since a minimum of two percent of any population can be counted on to be diabetic, the importance of this preventive program to locate the diabetics and bring them under treatment is evident. All patients found with glucose levels indicative of possible diabetes are referred to physicians for diagnosis and treatment. This extended program is made possible through the assign-

ment to the State of one of the program consultants of the U. S. Public Health Service, Mr. Wendel Maddrey. His demonstrations of laboratory procedures and orientation conferences with local health department personnel is becoming a feature of the expanding program of Chronic Disease Control activities.

The Wake County study of diabetic patients over 65 years of age in a large private clinic, is turning up new information on the local epidemiology of this disease. It can be very helpful in future program management in all parts of the State. This study is in co-operation with the School of Public Health at Chapel Hill and the Wake County Health Department.

Several county projects have been set up as demonstration openers for the general chronic disease program. The Wake and Pamlico studies are specialized towards a single disease.

An organized Home Care Demonstration project was begun in Person County, September, 1958, and is designed to demonstrate what an organized rural community program can do for the home care and rehabilitation of its chronically ill. The primary aim of the program is to secure adequate medical service to all those needing it at a cost far below that of usual hospitalization for a small portion of these same patients.

A co-operative budget, with participation of the State, the County and the U. S. Public Health Service was set up with the Chronic Disease Section furnishing salary and travel for two additional nurses, and a clerk. The Staff was further increased by a medical social worker and physical therapist. The wholehearted co-operation of the physicians and citizenry of the county has proved to be the guaranty for success of the endeavor. A level of care is now being provided in this County that can set a model for very wide extension.

In *Guilford County*, an overall chronic disease survey was made in the period 1957-59 and a planned program outlined for the nearly 4,000 diagnosed chronic disease patients. A chronic disease hospital was set up in 1959, and a program of home nursing developed. The Chronic Disease Section undertook to finance the salary of a physical therapist for this area.

In *Alamance County* the health department nursing staff has embarked on a program of home nursing in co-operation with the physicians there. The Chronic Disease Section has given scholarships to four county nurses who have studied rehabilitation nursing at Bellevue Hospital in New York. Salary for one additional county nurse for this demonstration program is also provided.

In *Warren County* a program of improvement has been inaugurated with the securing of a well-trained full-time public health director in a co-operative program financed by the State, the County, and the School of Public Health, and the Chronic Disease Section (which supplies the salary of a nurse). The design of activities includes close attention to reporting and surveying both communicable and chronic diseases, with special attention to health services for the chronically ill and the aged. Again this is an attempt to demonstrate what can be done in one of the less industrialized counties with rather low per capita income.

Cancer Section

The Cancer Program proceeds in three phases:

The first phase is hospitalization for treatment of probably curable cancer in patients diagnosed by their physician and certified indigent by the county welfare officers.

In the preceding biennium the patients so hospitalized numbered 696 in 1958-59 and 623 in 1959-60.

The average cost per patient in these years were \$172.56 and \$194.47.

There are 61 hospitals in the State approved by the State Board of Health as adequately staffed and equipped for this part of the Cancer Program.

The second phase of the program is the three-day hospitalization for diagnosis. This service is used by physicians throughout the State, and is available at all 61 hospitals on the approved list. Its purpose is to make available for isolated individuals a confirmatory diagnostic service that otherwise would be unobtainable or avoided by these patients.

Through the years an average of 50% positive diagnoses for cancer has been obtained in these suspected but otherwise unconfirmed cancer patients. An additional hospital stay for treatment is routinely at once available for these proven positives, thus avoiding any further delay after diagnosis. The average cost per patient for this diagnostic service was \$57.00 in each of the two years of the biennium. Admissions for diagnosis in 1958-59 were 972, and in 1959-60 were 567.

The third phase of the program is the provision of cancer detection clinics. Seventeen are now in operation and one is due to start later in the year. In the preceding year, three new ones were opened, and one closed.

The Governor's Cancer Commission has requested that five new ones be promptly opened in selected strategic points in the State. It is evident that the clinic program ably helped by the local cancer societies makes it possible to reach a large number of potential or actual cancer patients who otherwise would probably not come under medical care in time to be effective. All found are promptly referred to their physicians for treatment and follow-up. The clinics are particularly effective in finding early cancer of the uterus, the second most common form of cancer in women. There is every reason for physicians to welcome this clinic aid in locating cancer patients early. It greatly increases the number of patients coming under their care, and lightens the burden of an extensive indigent practice.

The available funds for hospital treatment for these patients have characteristically been exhausted after seven or eight months of the budget year. The statistical summary below shows 2,858 hospitalizations were financed during the biennium.

The State Laboratory of Hygiene in the year 1959-60 made 31,566 cancer cytology examinations, approximately one-third of these coming from the seventeen clinics, the balance direct from physicians. One and one-half percent of these laboratory examinations had results indicative of cancer.

All positive and suspicious results are referred to physicians for follow-up diagnosis. The Section was instrumental in helping to secure a special grant from the U. S. Public Health Service to train cytologists (on fellowship) in one of the medical school's department of pathology. A full year's salary and provision of microscope is provided for each of three trainees.

The combined clinic, laboratory, and hospital program represents a major attack on this great burden of preventible illness, incapacity and early death.

	1958-59	1959-60
Patients hospitalized for treatment	696	623
Cost per patient	\$172.56	\$194.47
Number of Hospitals approved for Cancer treatment	61	61
Patients hospitalized 3-days for Diagnosis	972	567
Cost per patient	\$57.00	\$57.00
Cancer Slides examined in Laboratory	27,486	31,566
Coming from 17 clinics	9,927	9,929
Percent positive or suspicious	2.3%	2.4%
Coming from Private Physicians	17,559	21,637
Percent positive or suspicious	2.4%	2.9%

Heart Section

The activities in the heart field proceeded along three lines:—Professional education, aid to heart clinics, and county projects for home care and rehabilitation of those disabled by heart and cardiovascular disease.

Funds specifically allocated for heart disease were available only from Federal sources during the biennium. However, equal matching with local funds (as is required), came chiefly from county outlays for home nursing and clinic care of cardiac patients, with some State funds going for central outlays for laboratory, vital statistics, x-ray and administrative activities.

A new feature of the program beginning in the second year of the biennium was the institution of county projects for home care nursing and physical therapy for heart patients. In five counties additional nursing service specifically directed toward home care of cardiac patients, has been provided as a demonstration of what can be done in this field. Three physical therapists have been employed for the program, and bring a much needed service, especially to stroke patients, in rehabilitating them to maximum self-care and activity, or complete recovery. Such service early applied is vital for preventing progressive deterioration in many of these disabled persons. Physicians have cooperated eagerly in the program by referring patients. The savings over corresponding hospitalization expenses is evident.

The clinic program has included the provision of a technician in each of two University clinics; supplying penicillin for indigent rheumatic heart patients on prophylactic therapy via several clinics; a home economist in one county to demonstrate to the housewives partially disabled by heart disease, how to conserve energy outlay with improved equipment and work procedures; follow-up at the State level of all x-ray films showing abnormal heart shadows so as to secure physician care, diagnosis and follow-up.

A heart clinic financed by the State Board of Health is operated at Sylva in Jackson County with highly trained specialty service provided. Part of its activities have to do with surveying all county school children for evidence of rheumatic heart disease, and bringing them under early prophylactic treatment.

Professional education has been continued as a valued contribution for the better care of cardiac patients. Short courses in cardiology, electro-

cardiography, and pediatric cardiology have been provided in the three medical schools, staffed by outstanding specialists in the field. Scholarships from the Heart Section were provided for the physicians attending these courses. In 1959, 100 such scholarships were provided; in 1958, 80 scholarships.

In addition tuition is provided for in-service training in cardiac nursing for approximately thirty-five public health nurses each year, the courses being provided at UNC Memorial Hospital in Chapel Hill.

The heart budget also participated in 1960 in a two weeks training course in health problems of the aging; fifteen fellowships for local public health personnel were provided for this gerontology course. Plans for a two weeks training course in rehabilitation nursing have been completed for the coming year.

Nutrition Section

Program Activities:

Continuing programs have been those concerned with mothers and infants, preschoolers, the school age child and the adolescent. These groups were reached through clinics, (prenatal, infant, preschool, well-child, orthopedic), home visits, consultations and conferences with health directors, nurses, and teachers. Nutritionists attended 800 clinics in which 3,398 persons were interviewed and gave consultation to 969 groups, involving 4,048 persons, and to 2,868 individuals. The consulting dietitians visited 19 children's institutions.

Assistance with integration of nutrition into elementary and secondary curricula, including school lunch programs, was given through conferences and consultation with administrators, inservice education for nurses and teachers, and participation in curriculum committees, conferences and workshops. The nutrition consultants met with 65 groups of administrators, teachers, and school lunch managers. Three dietary surveys were made of fifth grade children.

Program emphasis was placed on inservice nutrition education for the public health nurses. Since nutrition is closely associated with the activities of public health nursing, especially as related to family health, the nutrition information was geared to meet family needs, and workable nutrition information to help families with food selection and preparation, budgeting, and teaching good food habits. Nutritionists met with 127 groups of nurses for inservice nutrition training.

New Services—1) Among the recent concerns of community health programs are older people, including their nutritional needs. Nutrition services vary from adjusting a normal diet to modifying a diet to meet a particular disease condition. Where there are organized home care programs in chronic disease, the nutritionist works as a member of the professional team. Intensive services were given in two counties; an intern was assigned to one of these counties for a period of six months where she concentrated her services in the chronic disease program. A nutrition consultant has visited in these two counties on the average of three days per week for six months. Forty-seven consultation conferences and 176 home visits were

made. Visits were also made to boarding homes for services to individuals on the chronic disease program.

The nutritionists participated in 27 meetings with team members and lay individuals in the community interested in the chronic disease program. Guidance was given to 24 operators of homes for the aged on diet therapy and all phases of food service.

2) Industrial management is focusing attention more and more on improving and maintaining health of industrial workers as a means of promoting efficiency and building morale. Good nutrition is recognized as a primary means to this end. There is a growing number of requests from management in industries for nutrition services. To date these requests have been mainly for teaching food selection to the employees for the purpose of weight control.

Nutritionists have met with 22 groups for weight control discussions involving 313 people. Since women constitute the majority of these groups, family food problems, such as the importance of a good breakfast, planning lunch boxes, foods for snack time, were included in the discussions.

Another phase of this work underway is a nutrition education program, in co-operation with industrial physicians and nurses. It is expected that this type of program will expand in the immediate future.

Co-operation with other agencies and Organizations. Leadership for dietetic and nutrition activities has been given to other agencies and organizations. Through co-operation with the North Carolina Hospital Association and the North Carolina Dietetic Association, an institute for hospital food service personnel was conducted for the seventh and eighth years. The consulting dietitian served as coordinator. In 1959, there were 40 hospitals represented with an attendance of 58; in 1960, 54 hospitals, with an attendance of 70.

The Prison Commission has had routine assistance with menu planning. Thirteen mass feeding classes with a registration of 211 were conducted for the Red Cross.

The dietary consultants reviewed 39 blueprints and specifications for the Medical Care Commission. These were for the purpose of remodeling or designing new dietary departments for both hospitals and nursing homes.

Y.W.C.A.'s have used the services of nutrition consultants to conduct six weight control groups involving 213 persons.

Community Nutrition Education. The staff members participated in community programs for a Diabetic Seminar, the North Carolina Health Council, an institute, "Food As Teen-agers See It", "Better Breakfast Week" program, and two School Lunch Workshops.

Materials. Pamphlets and exhibits prepared by staff members:

Mother, This is for You	11,250 distributed
Happy Meal Time	8,350 "
Get Your Vitamins from the Food You Eat	10,850 "
Get Your Minerals from the Food You Eat	10,000 "
Give our Child a Real Meal at School	12,000 "
Exhibits—nutrition education	71

Staff

Resignations, with resulting vacancies during the biennium, have had a direct influence on the staff and the program. The position of chief was

vacant from April, 1956 until May, 1959. One of the principal nutritionists acted as chief until her resignation in October, 1958. The other principal nutritionist, five nutrition consultants, and a dietary consultant also resigned during the period. At the end of this biennium the Section staff consists of a chief, 1 principal nutritionist, 2 dietary consultants, (one on a year's leave of absence), 5 full-time and 1 part-time nutrition consultants. There were 3 nutrition consultant and one principal nutritionist positions vacant on June 30, 1960.

Recruitment. The Section staff continued emphasis on recruitment of nutritionists and dietitians into the field. The basis of this recruitment is the nutrition internship under which four interns have received training in preparation for graduate study in nutrition and public health.

Two students from schools of public health have each had eight weeks supervised field training, and 18 dietetic interns have been given orientation to public health nutrition.

Inservice Training. Knowledge of the science of foods and nutrition is changing rapidly. Every effort is made to keep staff members up-to-date on new scientific nutrition information, so that the gap between research and practical application is lessened. This was accomplished by giving staff members an opportunity to attend ten institutes and workshops during the biennium.

Professional Activities. Staff members served as officers and committee chairmen in the following professional organizations:

N. C. Home Economics Association	N. C. Health Council
N. C. Public Health Association	N. C. Youth Fitness Commission
State Nutrition Council	N. C. Dietetic Association

DIVISION OF EPIDEMIOLOGY

July 1, 1958-June 30, 1960

During the biennium ending June 30, 1960, the Division Director carried to a successful conclusion the Federal poliomyelitis vaccination program, which began in North Carolina in October 1955 and closed in this state as of June 30, 1960.

From early 1955, when the National Foundation initiated its limited vaccination program (which merged into the Federal program in October 1955) until the close of the Federal program on June 30, 1959—a period of more than four years of continuous operation—inoculations totaling 3,587,599 were recorded in North Carolina for children from birth through 19 years of age, and expectant mothers. Of this total, 1,407,367 were first inoculations, 1,228,458 were second inoculations, and 951,774 were third or booster inoculations.

Toward the close of the Federal program, state-wide vaccinations began with non-Federally purchased vaccine. The term "non-Federal" applies to all vaccine not purchased with Federal funds, whether bought locally by the counties or supplied direct to them by the National Foundation or other outside agencies, or made available to them by a special allocation from the North Carolina Emergency and Contingency Fund following the enactment of the 1959 North Carolina law requiring the vaccination of all children prior to admission to school.

At the close of the 1958-60 biennium (June 30, 1960), a total of 689,396 inoculations had been reported to the State Board of Health under the *non-Federal* vaccination program. Of this number, 210,010 were first inoculations, 181,939 were second inoculations, 163,763 were third inoculations, and 133,684 were booster inoculations.

Meanwhile, the incidence of poliomyelitis cases reported since the beginning of the vaccination program (Federal) in October 1955 through the close of the 1958-60 biennium (June 30, 1960) shows the following:

					Cases Reported	Paralytic Cases Reported	Paralytic Annual Decrease
Cases reported for calendar year	1955	460	179	39.7%			
" " " " "	1956	315	179	0.0%			
" " " " "	1957	233	52	70.9%			
" " " " "	1958	74	52	28.8%			
" " " " "	1959	313	270	629.7% (increase)			
Cases reported for first 6 mos. of	1960	8	7	63.1% (1st 6 mos.)			

Through the biennium to January 1, 1960, the Division continued to operate with eight sections; however, on January 1, 1960, Dr. W. M. Peck, Chief of the Chronic Disease-Radiation Section, resigned to accept a position as Director of Public Health for the Island of Guam in the South Pacific.

Effective on that date, the Section was discontinued, as such, with the Chronic Disease Program being transferred to the supervision of Dr. D. F. Milam, who is in charge of Heart and Cancer Programs in the Personal Health Division, and the Radiation Program being transferred to the

supervision of Dr. W. L. Wilson, Chief of the Occupational Health Section in the Division of Epidemiology.

The Division of Epidemiology is now comprised of seven sections in addition to Administration: (1) Communicable Disease Control, (2) Veterinary Public Health, (3) Tuberculosis Control, (4) Venereal Disease Control, (5) Accident Prevention (home and farm accidents), (6) Public Health Statistics (vital records), and (7) Occupational Health (including Radiation).

During the biennium several changes in administrative chiefs of sections within the Division occurred: Dr. B. F. Rosenblum, an officer of the Public Health Service on assignment to North Carolina as medical director of the Venereal Disease Control Section, was transferred elsewhere, to be replaced by Dr. W. L. Bunch, also a USPHS officer, who arrived in August 1959. Dr. Bunch continued on duty for the remainder of the biennium.

Another experienced, qualified medical director was added to the Division staff in August 1959 when Dr. W. L. Wilson succeeded Dr. H. R. Coler as Chief of the Occupational Health Section, Dr. Coler having resigned for health reasons.

In July 1959, by legislative appropriation, the State assumed full responsibility for the farm and home accident prevention program, which was formerly financed by Kellogg Foundation funds and, subsequently, for one year by Federal funds allotted to the state.

In January 1960, by legislative action and funds appropriated for the employment of an additional engineer, the Occupational Health Section assumed responsibility for dust control activities (counting) in all foundries of the State, a service not formerly performed in North Carolina.

During the biennium, the Public Health Statistics Section was expanded by the addition of a biostatistician in February 1959.

During the biennium, all Section Chief positions were filled with experienced and competent directors. A detailed report of the activities of each of the several sections of this Division is submitted below:

Communicable Disease Control Section

The North Carolina communicable disease experience in the past two years, with a few striking exceptions, shows progress in reduction of cases reported. In sharp contrast to the years immediately preceding 1959, the number of cases of infectious hepatitis and poliomyelitis increased.

A second outbreak of Asian influenza was seen in early 1960. As in 1957, cases numbered several hundred thousand.

These events serve to highlight the continuing need for communicable disease control activities.

The Section is directed by a full-time Section Chief. The assignment of a physician field epidemiologist through the Communicable Disease Center of the U. S. Public Health Service to the Section further expanded its activities. During a major portion of the biennium, a nurse epidemiologist was also stationed in the Section under Communicable Disease Center auspices. Both individuals added greatly to the strength of the Section; however, dependence of disease control activities on such personnel is hazardous since such individuals are subject to frequent transfer.

Cases of diphtheria in 1959 fell to the lowest level (20 cases) since reporting was initiated. Widespread immunization programs of private physicians and health departments have been highly effective in control of this disease.

After declining for five years, the number of cases of infectious hepatitis increased from 78 in 1958 to 118 in 1959. Furthermore, the period January 1-June 30, 1960 gave evidence of continuation of this trend. It seems certain that cases occur in a cyclic pattern and that the present period is characterized by state and nation-wide case increase.

Vigorous campaigns to increase use of Salk vaccine were carried out. In cooperation with the Communicable Disease Center and local health departments a number of communities were surveyed to determine levels of poliomyelitis immunization. Vaccination against poliomyelitis was made compulsory for children from the age of two months to six years.

Early in the biennium vaccine for immunization was made available through Federal funds, and more recently vaccine was supplied to the indigent through State appropriations. Poliomyelitis cases fell steadily over a period of years, and after a most favorable experience in 1958 when 74 cases (37 paralytic) occurred, the downward trend ceased as reflected in the 313 cases (270 paralytic) occurring in 1959. Approximately 60% of patients suffering paralysis had received no poliomyelitis immunization. One hundred sixty-six cases were seen in children under five years of age. Thirty-seven cases occurred in adults. Twenty-one deaths occurred.

Numbers of cases of whooping cough, measles and scarlet fever were in keeping with the known cyclic behavior of these illnesses. The latter disease remains important since prompt treatment is required to prevent subsequent heart (acute rheumatic fever) and kidney disease.

Rocky Mountain spotted fever shows little change in cases reported from year to year. As expected from tick transmission, most cases are seen in the May-August interval. Most occur among children.

Malaria, once an enormous problem, is now rarely diagnosed. The few cases reported were of extra-territorial origin, save one. This case was classified as native in type; however, laboratory material was not available to confirm diagnosis.

Of the many important diseases transmissible from animal to man in North Carolina—anthrax, psittacosis, rabies, tularemia, and undulant fever—absence or small numbers of cases reported point to effective control measures.

Periodic occurrence of influenza outbreaks, now of the Asian type, have been responsible for tremendous numbers of illnesses. While the mortality was never high, a considerable number of deaths were noted following each epidemic.

Given below is a table presenting data relative to number of cases of the major communicable disease in North Carolina for the years 1955-1959 and January-June 1960:

**Summary of Reported Cases of Major Communicable Diseases,
North Carolina, for the Years 1955-1959, and January-June 1960**

Disease	1955	1956	1957	1958	1959	Jan.-June 1960
Diphtheria	85	70	49	32	20	2
Encephalitis	16	34	55	53	36	12
Hepatitis	313	128	110	75	118	167
Malaria	18	4	4	6	2	2
Measles	1,385	7,630	1,960	4,590	3,391	738
Meningococcus						
Infections	144	96	112	90	77	39
Poliomyelitis	460	315	233	74	313	8
Rocky Mountain						
Spotted Fever	43	35	37	25	24	6
Scarlet Fever	2,104	1,206	1,034	1,351	1,325	558
Septic Sore Throat	60	35	47	55	53	11
Smallpox	—	—	—	—	—	—
Tularemia	9	16	12	12	7	1
Typhoid Fever	37	23	23	17	18	2
Typhus, Endemic	5	2	5	2	4	—
Undulant Fever	2	10	12	7	4	—
Whooping Cough	1,366	539	161	401	577	47

Public Health Statistics Section

This Section was established in 1950 in its present organizational structure, at which time all essential statistical services of the State Board of Health, including vital statistics, were centralized and assigned to the Section.

The vital statistics activities of the Section are many and varied. Securing more complete, accurate, and prompt registration of more than 150,000 births, deaths, and fetal deaths annually, raising the standards for filing delayed birth certificates, and placing local registrar duties in local health departments are some of the objectives in vital statistics now being accomplished. The birth, death, and fetal death certificates are more complete and accurate than ever before, and over 92% of them are filed within the required time limit. Raising standards for filing delayed birth certificates has resulted in a wider acceptance of these records by governmental and other agencies who require proof of birth for various reasons. As of June 30, 1960, 79 counties had been consolidated with the health director serving as local registrar.

Another important vital statistics function of the Section is the prompt and efficient certification and verification of birth and death certificates on file. There were more issued during the last biennium than in any other two-year period since the vital statistics laws became effective in 1913 due, primarily, to the increasing number of birth and death records on file (over 7 million) and to the more varied uses now being made of legal copies of these records.

The Section has, in the past biennium, obtained the services of a full-time statistician who coordinates the statistical activities and works closely with the program directors in providing the services needed. The activities of a research nature are being expanded and, in the future, we expect to increase the statistical services to local health departments on a consultative basis. This phase has already begun.

The statistical activities of the Section may be grouped into several areas: preparation and publication of statistical data relating to vital

events for general use, statistical data and services provided program directors in the carrying out of their respective programs, and statistical services concerned with research in public health.

Statistics based on birth, death, and fetal death certificates play an important role in determining the programs of a health department. The health director must know what the public health problems are in his area and where to concentrate his efforts in effecting a solution. It is important to keep posted on the incidence and prevalence of disease, the birth and fetal death rates, number of deaths and rates from certain diseases among certain age groups in the population.

He should be familiar with the leading causes of death in his community, the infant and neonatal death rate, maternal death rate, number and location of cases of diphtheria, poliomyelitis, typhoid fever, venereal diseases and many others. This is only part of the statistical data published in the monthly and annual reports of the Section. These reports are widely disseminated in order to satisfy the demands of consumers not only in the public health field but in almost every walk of life.

Statistical services are now being performed for 15 health programs in the State Board of Health. The services furnished ranged from the simple preparation of tabulations and graphs to the design of complicated sample surveys, including the planning and supervision of the field work, the compilation, presentation, and analysis of the data. The Central Tabulating Unit prepared 2,076 medical and health tabulations for program directors during the past biennium. Many of these tabulations required further analysis of the data at the request of the program directors.

The Section is involved in several statistical projects of a research nature. The more important will be discussed briefly.

(1) *Fetal and Neonatal Mortality Study*. Objective of this study is to gain more knowledge about those factors which may influence prematurity and mortality, with prevention as the ultimate goal. The study aims at promoting better maternal and child care by studying the characteristics of a large group of fetal and neonatal deaths compared with characteristics of a control group of survivors.

(2) *Wake County Premature Study*. Objective is to study the effects of prematurity on the physical, psychological, and social development of a group of Wake County children now 8-10 years of age.

(3) *Poliomyelitis Surveys in North Carolina Counties*. Several surveys have been done in the State, the objective being to determine the level of immunization of the population by age group and socio-economic status.

(4) *Wilson County Tuberculin Survey*. Purpose of this study was to study tuberculin sensitivity by age, race, sex, and urban-rural residence. Except for possible follow-up work in the county, this study was completed during the biennium.

(5) *Lung Cancer—Leukemia Study*. Purpose was to compare deaths from these diseases by occupation, race, sex, age, urban-rural residence with a comparable group of deaths from other causes. An attempt was made to measure the effect of occupation in lung cancer and leukemia deaths while holding other factors constant.

(6) *Nursing Time and Cost Study*. This study was initiated to determine where public health nurses spend their time and in what programs and

activities. Another objective was to determine the cost of each program and activity based on the total time spent in each, and to determine the cost of home visits.

Occupational Health Section

Personnel changes brought in a new Section Chief, an additional engineer authorized by the 1959 Legislature, and one stenographer. The broadening scope of activities has been confirmed in a recent detailed, enlarged revision of the Section's Program Plan.

This was reflected also by resumption, after several years of neglect due to insufficient personnel, of environmental surveys of the State's foundries; by establishments of a positive, coordinated State Radiological Health Program, in accordance with 1959 legislation; establishment and field testing of the State's Radiological Emergency Team; much closer coordination with the State Civil Defense Agency; initiation of a positive new occupational health program for the State's agricultural workers; and consistently increasing and more varied services to non-dusty trades as well as the increasing other industrial organizations.

Reference books and journals have been modestly increased, but sufficiently to provide the best up-to-date pertinent administrative and technical knowledge; all available survey and testing instruments and equipment have been tested, and where indicated have been modernized, calibrated, and restored to dependable functioning; technically improved and newly developed, proven equipment, ensuring more and better surveys, has been added.

During the second year of the biennium, there has been a more concentrated attention to increased cooperation with the Governor's Council on Occupational Health, the State's medical, dental, and veterinary societies, other state agencies, and with neighboring southeastern states and appropriate Federal agencies, especially the Public Health Service and Atomic Energy Commission; AEC inspectors have been accompanied on inspection visits to their licensees.

The Section has been visited frequently by AEC and Public Health Service key personnel. All of this has resulted in elimination of many prior uncertainties and duplications of activities. It has focused recent attention of Federal agencies upon reasonable opportunities for, and brought forth expressed desires of, increasing their supports to the State through increased consultations, more training for our personnel, active supports to graduate training in our University system, and probably early assistance in the form of long-term assignment to the State of their specialized radiological health personnel, without State expenditures. Such valuable aids could not be procured in any other manner even with increased appropriations.

In this biennium, the Section staff has participated jointly with the University of North Carolina and the North Carolina State College in presenting two seminars for industrial nurses, two conferences on industrial ventilation, two seminars on radiation and radiological health, and a seminar on occupational health.

The staff has kept thoroughly abreast of technological and administrative advances through personally paid professional memberships and

journals subscriptions as well as by utilization of State references, and by official and personally paid attendance at conferences and highly specialized training courses (free usually, or at minimal registration costs). Benefits have accrued to North Carolina's workers through increased field visits and more well-informed technical consultations, special studies, and lectures and addresses to professional audiences.

Immense challenges remain. For six years ending 1959, through our program, there were 115 new cases of silicosis diagnosed; yet there was an annual average of nine deaths from this disease. The monetary and human costs to employees, their families, employers and their communities, while immense, were preventable. There was an annual average detection of 28 other serious diseases not previously recognized. Serious job-caused absenteeism has continued at excessive rates in agricultural, construction, governmental employees.

Certain industrial noises, ionizing radiation, chemical intoxications, can be expected to create new and more hazards. Increasing industrialization creates not only more volume of, but more varied responsibilities, more demands for, field visits and recommendations to employers. We can meet the challenges by increased study, research, training of our personnel, and by cooperation with Federal and our other State agencies and with our privately practicing professions, given the means to do so.

X-rays taken by mobile unit in dusty trades	9,606
X-rays taken in non-dusty trades	6,991
Pre-employment x-rays from other sources	1,585
Employees issued work cards	9,938
Employees recommended to be removed from dusty trade	71
Employees recommended for further sanatorium studies	145
Employees with silicosis	41
26 First stage Silicosis	
9 Second stage Silicosis	
6 Third stage Silicosis	
Employees with asbestosis	3
1 First stage Asbestosis	
2 Second stage Asbestosis	
0 Third stage Asbestosis	
Other pathology	68
7 Tuberculosis	1 Carcinoma
48 Heart	1 Suspected tumor
1 Emphysema	1 Pneumonitis
2 Pleurisy	
7 Lung etiology undetermined	
Plants visited for x-rays	324
306 Silica plants	
8 Asbestos plants	
10 Non-dusty plants	
Plant visits for engineering purposes	564
Radiation monitoring surveys	33
Nursing consultation visits	160
Medical case histories submitted to Industrial Commission	5
Court hearings attended	5
Conferences—technical and professional	39
Specialized training of staff	10
New personnel	3

Tuberculosis Control Section

Mission. In general, the mission of the Section is to:

(1) Conduct chest x-ray surveys among the general population and special groups, using four—and, on occasion, five—mobile x-ray units. Special groups consist of industry, educational institutions, State institutions such as State hospitals, and certain special population groups selected by local health directors;

(2) Conduct health educational activities among the population prior to and during surveys;

(3) Emphasize continuing follow-up activities of those cases who have been found to have chest abnormalities;

(4) Plan chest x-ray surveys with local health directors, county officials, the local Tuberculosis Association, the Medical Society, local Board of Health, Negro leaders, civic organizations, churches, and other persons interested in disease control;

(5) Engage in special case-finding projects with other health agencies such as tuberculin testing in Pamlico County, Martin County, and furnish tuberculin testing supplies to counties. Counties furnished these supplies were Cherokee-Clay-Graham, Wake and Hoke;

(6) Maintain liaison with State institutions, local health departments, and other agencies for better tuberculosis case-finding. These institutions and agencies are:

State sanatoriums for the treatment of tuberculosis
State and non-State supported colleges
State mental institutions
Central Prison in Raleigh
State School for the Blind and State School for the Deaf
N. C. Tuberculosis Association and local tuberculosis associations
Local health departments
Veterans Administration
State Division of Rehabilitation

(7) Interpret miniature screening chest x-ray films for Forsyth, Cabarrus, Halifax, Stanly, Cumberland, Randolph, Duplin, Granville, Robeson, Edgecombe, Rockingham, and Richmond counties;

(8) Interpretation, at the Central Office in Raleigh, of all miniature survey films made by Section's mobile x-ray units. The number so interpreted varies from 206,000 to 300,000 per year;

(9) Whenever surplus equipment is available, such equipment—on request—is placed on loan in State or other agencies. During 1958-1960, the Section had on loan x-ray machines at the Duke University Medical School, the County Health Department at Halifax and Edgecombe County Health Department at Tarboro. Other equipment is on loan at Forsyth, Wake and Rockingham counties;

(10) Conduct extension activities formerly conducted by the Central Sanatorium at McCain. These extension activities consist in visiting certain counties at regular intervals;

(11) In cooperation with the State Sanatorium System to establish chest clinics in county health departments. These clinics have increased from 28 counties being served by such clinics and attended by qualified chest physicians to 68;

(12) To furnish a physician to attend chest clinics which are located in Asheboro, Louisburg, Oxford, Reidsville, Lexington and, beginning in November 1960, attend the recently organized clinic in Pamlico County. These clinics are now attended by the Director of the Tuberculosis Control Section.

Personnel and Equipment:

Personnel. One doctor, full-time director; on occasion, a physician is employed to assist in the interpretation of x-ray films. Nine x-ray technicians; one chief; seven full-time technicians and one part-time darkroom technician. Three full-time clerks, two in the Central Office and one in the field. One part-time consultant nurse available but not paid by this Section. One part-time health educator available but not paid by this Section. Six employees for supporting services: three in the Statistical Section, three in the Laboratory. Total personnel: 21.

Equipment. Six mobile x-ray units; four are used continuously, one on occasion and one as a standby unit. One trailer which houses a 14 x 17 x-ray unit that is used in follow-up activities. One office trailer. Three General Electric x-ray machines on loan.

Accomplishments.

During the biennium, the Section conducted 73 chest x-ray surveys in 52 different counties, and, to date, the Section's x-ray units have entered every county in the State except Surry, Alamance and Lee. Eleven of the 52 counties have been entered twice and two of the 52 counties entered three times. As of June 30, 1960, the Section had x-rayed 3,427,839 persons since the Section was organized.

Six colleges were surveyed, five were surveyed twice. Three penal institutions were surveyed twice and four mental institutions were surveyed once. Colleges and State institutions surveyed are listed as follows: N. C. State College, Raleigh; University of North Carolina, Chapel Hill; Meredith College, Raleigh; Peace Institute, Raleigh; St. Augustine College, Raleigh; Shaw University, Raleigh; Central Prison, Raleigh; Woman's Prison, Raleigh; Polk Prison Farm, Raleigh; State Hospital at Morganton, Morganton; State Hospital at Goldsboro, Goldsboro; State Hospital at Butner, Butner; State Hospital at Raleigh, Raleigh.

Budget.

The budget of this Section during the fiscal year 1958-59 and 1959-60 was:

	1958-59	1959-60
Federal	\$ 87,700	\$ 85,700
State	38,210	38,210
	<hr/> \$125,910	<hr/> \$123,910

The total amount of the appropriation is barely sufficient to support the Tuberculosis Control Section program.

In fact, it has been necessary to reduce actively operating mobile x-ray units from six to five, and, incidentally, the fifth operating only on occasion. It has also been necessary to reduce personnel in the field by one publicity clerk and one x-ray technician. This reduction of personnel handicaps the program.

Findings.

Tuberculosis suspects found in the Section's chest x-ray surveys have been steadily decreasing. It has been found, however, that tuberculosis is found in appreciable numbers whenever there is a strong and effective publicity program set up by the local health department. In fact, during the biennium the number of tuberculosis suspects found in a certain well-organized county was three times the number found in the adjoining county.

Available figures show that tuberculosis suspects have decreased from 5.65 per 1000 persons x-rayed during the 10-year period ending June 30, 1956 to 3.46 per 1000 persons x-rayed for the three-year period ending June 30, 1959 (findings ending June 30, 1960 impossible to compile at this writing). This shows the need of strong publicity campaigns and additional funds to secure health educators and medical social workers.

In addition to tuberculosis found during the fiscal year 1958-59, 0.4% abnormal hearts were found, (such findings for 1959-60 impossible to compile at this writing).

A tabulation of x-ray films made in the field by Section units, x-rays interpreted by the Section for counties and other agencies, and those made by Section units on loan is shown below:

Miniature x-ray films made by Section units in the field	358,706
Large films estimated to have been made by Section units in follow-up activities in the field	7,000
Miniature films made by x-ray units on loan (Duke Hospital, Halifax County Health Department, and Edgecombe County Health Department)	40,810
Miniature films read by Section for county health depts. (12)	60,569
Total	467,085

Venereal Disease Control Section

During the biennium 1958-1960, the program of the Venereal Disease Control Section was based upon case-finding through:

- (1) Contact interviewing and investigation,
- (2) routine examination and selective blood testing surveys, and
- (3) education; and upon diagnosis and treatment, by public or private means, of infected persons thus discovered. To assist in providing diagnostic and treatment services, Prevention and Control Centers located at Charlotte, Durham, Greensboro, and Wilmington continued their operation with full-time or part-time physicians. In addition, the Section assisted in providing part-time clinicians in survey areas, particularly where agricultural migrants were tested.

Reported primary and secondary syphilis continued to increase throughout the biennium. A total of 582 cases was reported during 1958-1960 compared to 400 in 1956-1958—an increase of 45.5%.

Total reported syphilis in all stages amounted to 8,114 cases compared to 9,356 for the previous biennium—a decrease of 13.2%.

It may be noted in the following table that changes in program emphasis have been necessary:

1. While the trend in total reported venereal disease cases diagnosed and treated is downward, the incidence of syphilis has increased. A broader and more intensified epidemiologic investigation of all primary and secondary syphilis cases reported have been applied. Members of the field

staff of this Section offer assistance to all counties in providing this necessary investigation.

2. During the last biennium, a new private-physician report form was devised. Private physicians reported 48.3% of the total syphilis cases during this biennium compared to 25.3% during fiscal 1956-1958.

It is estimated, however, that physicians report only 10% to 20% of the cases of gonorrhea diagnosed and treated by them.

3. Of the reportable communicable diseases in the State, gonorrhea ranks as No. 1 and syphilis as No. 2 during the biennium. Approximately two out of every three cases of communicable diseases reported in the State is a venereal disease.

Reported Cases of Venereal Disease, Fiscal 1959-1960

	1959			1960			Per Cent Change
	*PP	Clinic	**Total	*PP	Clinic	**Total	
Syphilis							
Primary and Secondary	48	189	255	62	226	327	21.5
Early Latent	300	389	700	324	349	691	— 2.3
Late Latent and Other Late	1,423	1,695	3,119	1,522	1,069	2,594	— 16.9
Congenital	83	156	239	97	92	189	— 20.9
Total Syphilis	1,854	2,379	4,313	2,005	1,736	3,801	— 11.7
Gonorrhea	871	9,190	11,876	856	7,714	10,010	— 14.8
Other Venereal Diseases			177			128	— 27.6

*Private Physician; **Total All Sources, including military.

The State has continued to train venereal disease investigators in a cooperative program with the U. S. Public Health Service. Twenty-four men were recruited and trained in North Carolina. In addition, 16 men were recruited in the State and were transferred, after a brief orientation period, to other states for continuation of their training.

Public health clinics made approximately 313,324 diagnostic observations for venereal disease, and treated 30,280 persons.

A total of 29,056 epidemiologic investigations were assigned. In addition, approximately 10,000 private-physician report forms were initiated.

Selective serologic survey activity was continued in the high incidence and/or prevalence groups in the State.

The educational program is three-fold: (1) Professional, by the Section Chief, through lectures, films, consultation, treatment recommendations, etc., (2) Patient education through the venereal disease worker and public health nurses, and (3) Education to the schools and general public by members of the venereal disease staff, using films, lectures, pamphlets, and news releases.

The total expenditures for the venereal disease programs for the 1958-1960 biennium was \$326,204; of which \$59,816 was State funds and \$266,388 Federal funds. Not included in this total are salaries of the Section Chief, one Nurse Officer, two Health Program Representatives, and five of six District Epidemiologists who are assigned to North Carolina by the Venereal Disease Branch, U. S. Public Health Service.

During the biennium, Dr. William L. Bunch, Jr., U. S. Public Health Service, replaced Dr. Bernard F. Rosenblum as Section Chief. Dr. Rosenblum was transferred to the City of Los Angeles.

Veterinary Public Health Section

This Section has the responsibility for planning and coordinating activities designed to eradicate or control those diseases of animals which are transmissible to man either by direct contact or indirectly through food products of animal origin or insect vectors. In North Carolina 25 of the 42 reportable communicable diseases have reservoirs in animals. The major activities are carried out through consultation, education, research and service.

Rabies. Rabies control programs were strengthened in several counties during the biennium. Assistance was requested by 35 counties relative to means and methods of providing more adequate control measures. Several counties appointed dog wardens and constructed model dog pounds during this period. The number of human antirabic treatments dispensed by the State Laboratory and positive animal heads examined continued to decrease, indicating the effectiveness of the state-wide control program. Rabies among the fox population of Bladen and Columbus counties threatened the public health and livestock economy in this area until brought under control through trapping programs initiated by the local health departments. Rabies remains a serious problem in Forsyth County among the dog population. Two amendments clarifying the State rabies law were enacted by the 1959 General Assembly.

Epidemiological Investigations. The Section staff assisted in the investigation of human cases or outbreaks of diseases as follows: Undulant fever, tularemia, encephalitis, botulism, leptospirosis, salmonellosis, Q fever, cat scratch fever, lymphocytic choriomeningitis, psittacosis, listeriosis and Rocky Mountain spotted fever. Surveillance of industrial anthrax and psittacosis problems discussed in previous biennial reports continued.

Surveys Conducted

1. *Salmonella.* Following a large food poisoning outbreak caused by Salmonella and possibly related to the consumption of poultry products, the Section conducted several bacteriological culture surveys in poultry plants to determine the incidence of contamination with Salmonella during processing operations.

2. *Q. fever.* In cooperation with the U. S. Public Health Service over 500 dairy herds were surveyed in five milk sheds from the mountains to the coast. Approximately 15% of the herds checked were found to be infected. The first human case was diagnosed in 1959 in Sampson County. The medical and public health professions have been alerted to this "new" disease in the state.

3. *Leptospirosis and Brucellosis.* A limited survey of deer killed during managed reservation hunts was conducted in cooperation with the Wildlife Resources Commission. The results were negative; therefore, deer cannot be considered as a serious threat to domestic cattle and swine in North Carolina.

Meat and Poultry Inspection Activities. Assistance was given to several local health departments in establishing adequate meat and poultry inspection for wholesomeness programs. Such programs prevent localities from becoming dumping grounds for diseased meat and poultry which do not receive Federal or State inspection.

Rendering Plant Inspection. The Section Chief represented the State Board of Health on the inspection committee authorized by the 1955 General Assembly requiring annual inspection of all plants. One plant moved to a new location and constructed a million dollar plant under the supervision of this Committee.

Teaching Activities. A credit course in veterinary public health and comparative medicine was presented by the Section Chief at the School of Public Health, University of North Carolina, for graduate students. Several lectures were also presented in other departments of the School of Public Health.

Consultations. The Section Chief consulted with local health directors and staff, county boards of commissioners and health, veterinarians, physicians, civic groups, school officials, wildlife clubs, and other state agencies on various matters relative to veterinary public health. A monthly news letter was distributed to all local health departments with an attached rabies morbidity map showing distribution of animal rabies by county, species and date.

Post-Graduate Training. The Section Chief attended the following courses during the biennium:

Pathology of Diseases of Laboratory Animals (Armed Forces Institute of Pathology, Washington, D. C., December 7-12, 1958)

Institute of Comparative Medicine (University of Michigan, Ann Arbor, Michigan, October 4-8, 1959)

Management of Mass Casualties (Walter Reed Medical Center, Washington, D. C., February 10-15, 1960)

Scientific Papers. During the biennium, the Section Chief was appointed to the 12-member Advisory Committee to the American Medical Association Council on Rural Health. This activity made it necessary to attend two meetings in Chicago in order to make plans for National Rural Health Conferences which were held in Wichita, Kansas (1959) and Grand Rapids, Michigan (1960). In Wichita, a paper on "Animal Disease Affecting Rural Health" was presented by the Section Chief.

Other papers prepared during the biennium were:

"Meat Inspection—A Local Necessity"—AVMA Journal, 1959

"Leptospira in Wild Animals at Fort Bragg"—APHA Journal, 1959

"The Veterinarian in Public Health"—Indiana State Board of Health, 1959

"Q Fever in North Carolina"—Dairy Servicemen and Sanitarians, N. C. State College, 1959

"Salmonella in Poultry Processing Plants"—American Veterinary Medical Association, Kansas City, 1959

"Relation of Poultry Diseases to Public Health"—Sanitarians Conference, N. C. State College, 1958

"Protecting the Safety and Quality of Food"—Hospital Food Service Institute, Raleigh, 1960

"How the Veterinarian Can Protect His Client Against Animal Diseases"—University of Florida Medical Center, 1960

General. On September 1, 1959 Dr. Ben W. Dawsey, a prominent practicing veterinarian from Gastonia, was sworn in as a member of the State

Board of Health, having been appointed to this position by Governor Luther Hodges.

Accident Prevention Section

Home and farm accidents continue to be a major source of mortality, injury, and disability in North Carolina. In the year 1958 all accidents caused 2,441 deaths in the State. Of the total number, 1,146 deaths were caused by motor vehicle accidents; 843 deaths were caused by home and farm accidents; the remaining 452 deaths were caused by accidents occurring in public places, recreational areas, and in places of work.

In analyzing home and farm accident deaths according to the age of the victim, one finds generally that the young and the old bear the greatest burden of mortality. Since young children and those in the later years of life spend proportionately a much greater share of their time in the home, their unfavorable experience with this type of accident is easily understood. Death rates for home and farm accidents are highest for the groups under the age of five years and past the age of fifty-five years.

Statistical data regarding accidental injury in the home and on the farm are not available for the entire state since there is no single agency or mechanism for the reporting of non-fatal accidental injuries occurring in these sites. Estimates based on nation-wide studies would place the number accidentally injured in the home and on the farm in North Carolina at a minimum of 115 persons annually with the maximum estimate reaching the total of 500,000 persons per year. Both of these totals are greatly in excess of estimated or reported accidental injuries due to accidents occurring on the highways, in industry, or elsewhere.

On July 1, 1959, the Section began to operate on State funds appropriated by the 1959 General Assembly. Prior to that date, financial support was provided by Kellogg Foundation and Federal funds. The Section staff consists of one health educator and one stenographer clerk full-time and a physician on a consultant basis.

During the biennium, the staff worked with health departments staffs in 41 counties on a variety of accident prevention activities. Assistance to local health departments varied from conducting intensive in-service education programs for staff members to such special projects as helping to plan a series of local radio programs on home and farm safety. All local health departments have received regularly the Section news letter, "Home Safety News Notes". They also received, periodically, statistical information on home and farm accidental deaths as well as new educational materials as new materials are produced.

Several studies of specific home and farm accident problems have been made during the biennium. These have included: Accidental deaths of children 1 to 6 years; accidental deaths among individuals 60 years of age and over; accidental deaths due to firearms; accidental deaths among school-age children; deaths due to drowning; and accidental deaths involving machinery. Results of these studies have been made available to county health departments and other concerned agencies and individuals.

In May, 1959, five one-day in-service education programs on accident prevention for sanitarians were held in five locations across the State. These programs were planned jointly by the Section staff and the staff

of the Sanitation Section. Approximately 200 local sanitarians attended these educational meetings.

The Section staff has given assistance to 25 local units of the N. C. Agricultural Extension Service. In some instances, the staff has conducted training courses for local health and safety leaders. In other cases, help has been given local agricultural and home economics agents in planning safety demonstrations for meetings, in planning safety activities for 4-H club groups, and in planning special exhibits on home and farm safety.

The Section has assisted in the establishment of additional poison information services at local hospitals. Poison information centers have been established at the James Walker Memorial Hospital in Wilmington; at Mercy Hospital in Charlotte; and in Surry County Memorial Hospital at Mount Airy. Other centers in the State are the Duke Poison Control Center in Durham and Onslow Poison Control Center in Jacksonville.

An experiment in community off-the-job safety has been going in Winston-Salem spearheaded by the major industries. The Section Chief has served as a consultant to this group along with safety specialists from the Department of Motor Vehicles, Department of Labor, and the Industrial Commission.

A study committee has been at work for some time exploring the possibilities for the organization of a state rural safety council. The Section Chief was a member of the study committee, which also had as members representatives from the State Medical Society, State Recreation Commission, Department of Motor Vehicles, Department of Public Instruction, North Carolina Farm Bureau, North Carolina Grange, and others interested in rural safety. After months of study, the North Carolina Rural Safety Council was organized in April 1960 and the Section Chief is a member of the Executive Committee.

Staff members have lectured on home accident prevention at the School of Public Health, Duke School of Nursing, North Carolina College, and at the Health Education Workshop for Teachers at High Point College.

Staff members have been program participants at several national, regional, and state meetings. These have included National Safety Congress; regional meetings in Accident Prevention at Washington, D. C. and Jacksonville, Florida; Southern Branch—American Public Health Association, Community Health Workshop, Southern States' Safety Conference, and North Carolina Society of Safety Engineers.

Staff members have been guest speakers at meetings of such groups as parent-teacher associations, community development clubs, civic clubs, and many others.

SANITARY ENGINEERING DIVISION

July 1, 1958-June 30, 1960

The activities of the Sanitary Engineering Division embrace the non-medical responsibilities of the State Board of Health in the field of environmental sanitation and are directed primarily to the communities or areas rather than to the individuals because of the wide application of environmental sanitation programs.

The Division's objectives since its creation has been the improvement of environmental conditions that affect the health and comfort of the people of the State. In accomplishing this, the personnel not only works with representatives of industry, organized community groups, professional groups, but with municipal and county officials and with other State agencies. The Division is responsible for the enforcement of Public Health Laws and Regulations and in the technical supervision of local sanitation programs in connection with the following:

- (1) Public, semi-public, and private water supplies
- (2) Private and institutional sewage disposal
- (3) Creation of Sanitary Districts
- (4) Sanitary engineering assistance to local health departments, municipalities, and other agencies
- (5) Sanitation of milk and shellfish
- (6) Sanitation of public lodging and eating places
- (7) Sanitation of public and private hospitals and institutions
- (8) Sanitation of meat markets, abattoirs, frozen food lockers, and poultry processing plants
- (9) Control of malaria and other insect borne diseases
- (10) Salt marsh mosquito control
- (11) Sanitary disposal of garbage and refuse
- (12) Sanitation of bedding manufactured, and
- (13) Environmental sanitation programs in radiation protection and air pollution control.

In addition to the above, most of which are covered by State laws, the Division assists in the training of local sanitarians, the development of local sanitation ordinances, preparation and distribution of technical bulletins relating to environmental health, and acts as consultant to local health departments and other State agencies on problems relating to sanitary engineering and sanitation.

The staff of the Division is comprised of 43 full-time and 1 part-time employees and consists of 15 sanitary engineers, 16 sanitarians, 1 entomologist, 3 bedding inspectors, and 9 secretarial workers.

During the past biennium considerable time was devoted to working with legislative committees, particularly the Committee on Reorganization of State Government and the committees concerned with legislation creating the Department of Water Resources.

Transfer of the Division of Water Pollution Control from the State Board of Health to this new agency affected the former program and activities of this Division to some extent since the law divided the responsibilities

regarding the proper treatment and disposal of sewage and industrial wastes between the Department of Water Resources and the State Board of Health.

Legislation was introduced also in connection with the sanitation of migrant labor camps, but this legislation did not pass because of opposition which developed in the counties where the bulk of migratory agricultural workers are employed.

The Legislature authorized the employment of one additional sanitarian. The employment of this man has made it possible to devote more attention to our shellfish sanitation program.

Work continued during the biennium on the revision of regulations to bring them more into conformity with the revised Public Health Laws, which were completely rewritten by the Legislature in 1957. Work has continued on the regulations relating to the protection of public water supplies; the foodhandling regulations were revised to include sanitation standards for outdoor dining areas.

At the request of the vending machine industry, regulations have been prepared and adopted by the State Board of Health which will become effective January 1, 1961, relating to the sanitation of automatic merchandising machines which are used in dispensing food and drink.

Assistance has been given a number of local health departments in the preparation or revision of local codes and regulations relating to swimming pools, trailer courts, and plumbing installations. We have cooperated also with the Building Code Council, and committees appointed by that Council, in the revision of the State Plumbing Code and a number of local plumbing codes.

Training activities, which we consider of vital importance in the promotion and development of our environmental sanitation program, were carried on during the biennium.

At the request of the Public Health Service, we arranged for and assisted in the production of a training film at Biltmore Dairies in Asheville regarding the milk sanitation program. This is the third time we have assisted in producing such training films in North Carolina; the other two related to foodhandling practices and food-borne outbreaks. These films are distributed throughout the United States by the U. S. Public Health Service and used in health education and training activities.

Special training courses were given local sanitarians at educational meetings held throughout the State. Five such courses were given during the past biennium dealing with:

- (1) New State Board of Health regulations on Hotels, Cafes, and Sewage Disposal
- (2) Legal Principles and Procedures for Sanitarians
- (3) Accident Prevention
- (4) Cross-Connections and Back-Siphonage, and
- (5) Demonstration of Community Sanitation Improvement.

This office has assisted in formal training courses for local sanitarians entering the field of public health; these courses being given at the School of Public Health, University of North Carolina, and at North Carolina State College.

During the biennium, considerable emphasis has been placed on food-handler training in addition to our standard type program, which has been carried on for a number of years. We have cooperated with the N. C. Travel Council during the past two years and have conducted a number of special training courses in the tourist centers of the State at the request of the Travel Council.

Work has continued in the field of milk sanitation, considerable time being devoted by our Milk Sanitarians in assisting with the change over to bulk milk storage tanks on dairy farms. This method of collecting and delivery of milk to the pasteurization plants is proving very popular and most satisfactory. At present 52 counties and 2 municipalities have ordinances requiring 100% pasteurized and approximately 99.4% of the State's milk supply being consumed in North Carolina is now pasteurized.

A complete sanitary survey of all jails and city lock-ups was completed during the biennium and reports were submitted to the State Department of Public Welfare as required by law.

Our program of assisting the State Prison Department in the inspection of all highway prison camps was continued. Excellent improvement has been made in the sanitation of these prison camps during recent years.

Special courses of instruction were also given the employees of the State Prison Department, particularly the stewards and others engaged in the handling of food at Central Prison and our entomologist conducted classes in connection with insect control.

As is to be expected, the problems in environmental sanitation are forever changing. Increases and shifts in population from rural to urban areas has created many problems particularly in the field of water supply and sewage disposal. Other radical changes are taking place in modes of living, care for the aged, etc., which bring with them additional sanitation problems or activities which fall within the responsibilities of this Division.

One such activity has been the rapid increase in the construction of nursing homes and homes for the aged. Considerable assistance has been given to prospective builders of these homes in suggesting plans for the over-all layout of these facilities, for foodhandling facilities, and for water and sewerage.

Progress has been made in the Salt Marsh Mosquito Control Program throughout eastern North Carolina. Two Mosquito Control Districts have been approved, as authorized by the Salt Marsh Mosquito Law, and excellent long range control work is being done in Pamlico County through drainage and construction of canals.

During the past biennium \$205,000 of State funds were allocated to the Salt Marsh Mosquito Control Program while contributions on the part of local communities taking part in this program amounted to over \$366,000, which is an indication of the interest on the part of the people living in the eastern counties in the control of salt marsh mosquitoes.

Another activity in the Insect and Rodent Control work has been the establishment of a Demonstration Vector Control Project in Rocky Mount. This was made possible through the cooperation of the city, the U. S. Public Health Service, and the State Board of Health. We plan to use this project as a demonstration and hope to establish similar projects in other counties of the State as the results of this demonstration become available. Excel-

lent results have been obtained so far and considerable interest has developed in Rocky Mount in connection with the general improvement in environmental sanitation.

Other special activities have been carried on in the Insect Control Program and some work was done on the study of herbiciding for the control of parrott feather in small farm ponds. The usual amount of time has been devoted to surveillance for anophelene mosquitoes on the large impoundments owned and operated by the power companies. Our engineers also worked with the officials of the Virginia Electric and Power Company and the Duke Power Company on plans for construction of additional power pools on the Roanoke and Catawba Rivers, and suggested mosquito control methods and practices.

Special attention has been given during the biennium to water and sewage disposal problems in the coastal counties where highground water tables exist. Serious sanitation problems have been created in some areas where sewage must be disposed of through individual septic tanks and where shallow ground water exists and has become polluted because of septic tank effluents.

In the field of water supply, a radiation monitoring program has been established to determine the background radiation in the major sources of surface water used as public water supplies. This program is continuing and during the biennium a report of findings to date was published and distributed to all municipalities participating, to educational institutions, and others interested in this particular phase of our program.

Considerable improvement continues to be made in municipal water supply and sewage disposal facilities. During the biennium contracts were let by the cities and towns for water improvements amounting to \$15,230,587; for sewerage improvements amounting to \$18,801,729; and for combined water and sewer projects \$11,412,549.

New sanitary districts were created at South Concord, Riegelwood, Meadow Green, and boundaries were extended at Haw River Sanitary District, Parkwood Sanitary District, Rural Hall Sanitary District, and Catawba Heights Sanitary District.

Emphasis has been placed on bringing under supervision a number of community water supplies which have been developed to serve real estate developments and small communities. We now have a total of 575 public water supplies under supervision in the State.

During the biennium the towns of Tarboro, Smithfield, Laurinburg, Washington, and Aberdeen began fluoridation of their public water supplies, bring to 31 the number of towns now adding fluoride for the prevention of dental caries.

In the field of garbage and refuse disposal, 21 new sanitary landfills were placed in operation during the biennium and it is estimated that 75 such landfills are now in operation. A suggested ordinance has been prepared for submission to local boards of health governing the proper collection, storage, and disposal of garbage and refuse.

Shellfish sanitary surveys have been made of the growing waters in Nelson Bay, Stumpy Point, White Oak River, Stumpy Point Bay, Silver Lake, and Sneads Ferry. Some of these surveys are continuing. Problems in the shellfish sanitation program, which were investigated during the past

biennium, consisted of "pink yeast" outbreaks and problems relating to certification by the Public Health Service of preheated oysters.

The office is receiving additional requests for assistance in connection with recreational activities, particularly with regard to construction of swimming pools and for the use of water supply reservoirs for expanded recreational purposes. We are considering these problems on an individual basis and are attempting to work out with the municipalities proper control procedures where they wish to allow expanded recreational activities on their water supply reservoirs.

During the biennium a special survey was made of the air pollution in North Carolina. This survey was made possible by a special grant from the U. S. Public Health Service. A report has been published with recommendations concerning this new activity in the field of environmental health.

We continued our cooperation with all of the State agencies concerned with activities relating to environmental sanitation.

A numerical tabulation of some of the major activities of the Division is given in the following tables.

NUMERICAL SUMMARY OF ACTIVITIES SANITARY ENGINEERING DIVISION

July 1, 1958-June 30, 1960

ENGINEERING

Public water supply inspections	856
Well sites examined and approved	295
Water samples collected	326
Special investigations conducted (water supplies)	136
Sewerage system inspections	329
Plant site investigations	365
Special investigations (sewerage systems)	124
Water supply plans approved	87
Sewage works plans approved	66
Sewage plant plans furnished	77
Sources of water supply examined for interstate carriers	49
Watering points examined	107
FHA and VA developments investigated	39
FHA and VA subdivisions processed	150
Special conferences with engineers, city & county officials	3,109

SANITATION

Milk plant inspections	432
Dairy farm inspections	3,229
Milk surveys completed	80
Milk plant plans reviewed	11
Special investigations (milk)	7
Conferences regarding milk	2,174
Foodhandling establishments inspected	3,832
School lunchrooms inspected	475
Abattoir and meat processing plants inspected	203
Meat market inspections	1,116
Frozen food locker plant inspections	82
Poultry plant inspections	96
Plans reviewed for foodhandling establishments	208
Foodhandler schools held	54
Private water supply inspections	4,781
Institutional water supply inspections	585
Private sewage disposal inspections	5,744
Institutional sewage disposal inspections	613
Privy inspections	2,236
Summer camp inspections	66
Institutions inspected	1,299
Hospital plans reviewed	95
Nursing/Rest/Convalescent Home plans reviewed	224

Public school inspections	241
Lodging places inspected	422
Complaints—general sanitation	414
Special investigations	600
Shellfish packing plants inspected	2,657
Retail seafood markets inspected	467
Patrol inspections of restricted waters	235
Plans distributed (shellfish)	16
Number of court cases	14

INSECT AND RODENT CONTROL

Communities assisted in planning or supervising landfills	141
Applications received for permits to impound water	1,148
Impounding permits granted	1,268
Mosquito surveys made	719
Arthropods identified	4,542
Communities assisted in planning or supervising insect control	1,292
Impounded water inspections	905
Inspections of refuse storing, collection or disposal	929
Inspections of bedding factories	5,012
Inspections of retail bedding establishments	13,577
Pieces of bedding removed from sale and/or condemned	11,161

LABORATORY DIVISION

July 1, 1958-June 30, 1960

In the fifty-third year of the Laboratory Division of the State Board of Health, the Laboratory's second Director, Dr. John Homer Hamilton, retired from active service on April 30, 1960, after serving for twenty-seven years in this position.

Dr. Hamilton devoted a lifetime to the ministry of public health. He began his contribution to public health in this state in a local health department in 1920. Through the years he contributed abundantly and unselfishly of his time and talent, wisdom and judgment, in many directions and helped always to keep public health in its proper prospective in relation to the total health program and to offer the greatest service to the greatest number of citizens.

With the trend of time, there have been many changes during this more than a half century of the Laboratory's existence. The Laboratory now renders service in three general classes: first, in the fields of communicable diseases, chronic diseases and environmental sanitation; second, preparation and distribution of biologics; third, approval of laboratories performing serological tests for syphilis under the State Marriage Law and those laboratories examining milk for interstate shipment.

This biennium may be evaluated favorably with previous bienniums in volume and quality of work rendered to physicians, health departments, hospitals, and other state institutions. A total of 944,499 laboratory examinations were made during the biennium. In 1956-58 there were 1,005,106 examinations.

Decreases in chemistry and in syphilis serology will be seen from the following tabulations. The losses in chemistry were experienced when the Water Pollution Division was transferred from the State Board of Health to the Department of Water Resources by the last General Assembly. Those losses in syphilis serology may be attributed to a cut in Federal Funds for Venereal Disease Control which resulted in a decrease in serology surveys.

There were increases in examinations in all of the other sections: Cytology, Environmental Health, and Infectious Diseases other than syphilis, and especially in the fields of radiological health, virology, cytology and special bacteriology. We were able to expand these services due to the fact that our chemical examinations for the Water Pollution Division were eliminated and the number of serological tests for syphilis was reduced making staff members available for these expanded services.

Chemistry

The Chemistry Section of the Laboratory performs sixty different routine tests plus special tests which may be required, and prepares the stains, solutions, and culture media used by other sections of this Division. The examinations made by the Chemistry Section are in the fields of chronic disease, occupational health, and sanitary engineering, including mineral analyses of domestic and public water supplies.

With the expanding suburban population using private wells, the demand for partial mineral analyses to determine whether the water needs treatment for hardness or corrosive properties is steadily increasing, and we can expect the request for this service to continue to increase.

Cytology

For more than twelve years the Laboratory has been making cytological examinations with a gain this biennium of 20,855. A total of 59,022 examinations were made. Of these approximately 20,000 were from Cancer Detection Centers receiving financial support from the State Board of Health, and the others were from private physicians. Specimens from clinical patients showed 294 positive findings or 1.4 per cent; those from private physicians were positive in 588 instances or 1.4 per cent.

With the present number of cytologists we expect to make approximately 80,000 examinations during the next biennium. One of our main problems in cancer cytology is training and keeping cytologists. When a cytologist resigns, it costs the Laboratory approximately 7,000 examinations since one trained cytologist can make 6,000 to 7,000 examinations per year. It requires at least a year to train a person in cancer cytology. Also, the number of examinations an experienced person can make is greatly reduced while training a new employee, hence another loss in the number of examinations made.

The need for cytological examinations in the State is as great as ever. At the present time, using all channels available for this test, only a very small per cent of the more than 1,200,000 women in the State who need the protection afforded by this test at least once a year could obtain this service.

Making the Papanicolaou test available to the physicians of the State is one of our greatest needs in preventive medicine at this time.

Environmental Health

Environmental Health Section examinations include those of dust, microbiology, shellfish and water. Atmospheric samples are examined for dust content. Microbiological tests are made to determine the cause of tastes and odors in water supplies and the cause of corrosion and clogging of water systems. Sea foods and water from oyster beds are examined in our Morehead City Shellfish Laboratory. Water samples from public and private water supplies are examined for sanitary quality.

In the field of microbiology, methods have been developed during this biennium to cultivate autotrophic bacteria on inorganic culture media so that these organisms may be readily identified.

Infectious Disease

The Infectious Disease Section provides a complete identification service for all bacterial, parasitological, Rickettsial and virological agents by cultural, microscopic and serological procedures where there is a standard accepted method available. During this biennium the fluorescent antibody procedure for recognizing Beta hemolytic streptococcus Type A has been put into operation. This enables the bacteriologist to identify from a mixed culture Beta hemolytic streptococci type A in from three to four hours as compared with from three to four days required by the previous procedure.

The Laboratory continues to serve as a Salmonella and Shigella typing center for North Carolina.

Phage typing of staphylococci was started during this biennium and the demand for this service continues to increase.

The better control of communicable diseases is reflected in the decrease in the number of specimens submitted and in the number of pathogenic organisms identified. This decrease in the number of positive specimens brings about a change that is often overlooked in laboratory work.

In an examination negative specimens require many more man-hours than do positive specimens since a positive is completed when the organism is found but more time is required on negative specimens to make certain they are negative. A minimum of one-half hour is spent on each negative smear for Tuberculosis.

In the examination of an animal brain for evidence of rabies a positive may be recognized in fifteen minutes whereas a negative may require the services of several bacteriologists over a period of an hour or more, and in addition, may require a mouse protection test where human beings have been exposed.

In case of diphtheria so few positive specimens are received that it requires the maintenance of stock-cultures for use by bacteriologists in keeping themselves able to readily identify the organism.

The Laboratory farm continues to be of invaluable service to the Laboratory especially in the field of Virology, since healthy and non-diseased animals are available in correct numbers and of the proper age when needed.

Approval of Laboratories

The Laboratory Division of the State Board of Health surveys and supervises laboratories making serological tests for syphilis under the State Marriage Law. This service requires a visit at least once a year to survey the laboratory and evaluate the work of the serologist and that split specimens of serums be submitted once each month to each laboratory as a check on the quality of work being performed. Additional visits are made when indicated or requested.

Laboratories examining milk used in interstate trade are surveyed and approved under a policy established by the State Board of Health in its September meeting 1953. This is done in cooperation with the U. S. Public Health Service. This service also requires a visit at least once a year and split samples of milk examined by each approved laboratory at least twice a year. Both of these approval programs are voluntary and by request of the laboratory being approved.

Services to Other Agencies

The Laboratory Division has continued to render services to other State and Federal agencies, though a major portion of the work is done for local health departments and private physicians.

For Federal Agencies: Sanitary analyses of water are made for the National Park Service, U. S. Forest Service, Bureau of Indian Affairs, U. S. Public Health Service, Tennessee Valley Authority, Department of Defense, and for other agencies when requested; serological tests for syphilis are made for Federal Agencies on request; and small animals and blood are supplied to the Veterans Hospital in Durham.

For other State Agencies: Radiological examinations are made on water samples for Water Resources Department; water analyses are made routinely for the Department of Conservation and Development, State Board

of Correction and Training, The North Carolina Educational Institutions and North Carolina Hospitals, and for other State Departments on request; bacteriological, serological, and chemical examinations are made for North Carolina hospitals and other State institutions on request. Upon request, in cooperation with the North Carolina Department of Agriculture, Pure Food and Drug Division, bacteriological examinations are made on routine food samples collected by that Department. Small animals and blood are supplied to Carolina Memorial Hospital and the Department of Microbiology of the University of North Carolina Medical School; and surplus mice are given to the State Museum to feed to live snakes.

The Laboratory performs numerous services such as calibration of microscopes, thermometers and glassware. Also, consultation service is rendered on laboratory problems to hospitals, health departments and others when requested.

The Laboratory cooperates with other divisions of the State Board of Health and with local health departments in the study of epidemic food-poisoning outbreaks, and problems in environmental sanitation whenever the need occurs.

Biological Products

The preparation, purchase and distribution of biological products continues to be an important activity of the Laboratory. The Laboratory farm does the preliminary manufacturing of smallpox vaccine and antirabic vaccine.

As may be seen from the numerical tabulation of biologicals distributed, there have been some significant changes in our biological programs. *Triple Antigen*, *Diphtheria*, *Tetanus* and *Pertussis*, continues to take the lead. During this period an amount sufficient to provide 406,460 injections was distributed as compared with 359,388 in 1956-1958.

There was a decided increase in the demand for *Tetanus Toxoid*—160,000 injections being distributed as compared with 57,400 during 1956-1958.

The American National Red Cross has continued to supply *Gamma Globulin* without charge. The State Board of Health's policy of limiting the use of this product to the control of Infectious Hepatitis and Measles in children is being followed.

The Laboratory distributed 52,513-9cc vials of Poliomyelitis Vaccine under the State-Provided Plan (for indigent and medically indigent children between the ages of two months and six years of age). Funds for this vaccine were made available from Contingency and Emergency Funds.

The 1959 General Assembly enacted the compulsory poliomyelitis vaccination law, requiring that the "parent, parents, guardian or any person in loco parentis of any child shall have administered to such child an adequately immunizing dose, as determined by the North Carolina State Board of Health, of a prophylactic agent against poliomyelitis . . . etc."

The *Financial Statement* shows an increase in expenditures. These figures, however, include approximately \$160,000 made available through Emergency and Contingency Funds for the purchase of poliomyelitis vaccine under the State-Provided Plan. Also a part of this increase was due to salary increases granted by the General Assembly for members of our staff.

The staff of the Laboratory Division consists of a director, an assistant director, thirty-one bacteriologists, six chemists, nine laboratory technicians, fourteen supporting administrative personnel and fifteen laboratory aides, including janitors and farm employees.

The recruitment and keeping of well trained personnel continues to be a problem due mainly to our salary schedule. However, the Laboratory is fortunate in that it has a strong corps of loyal and dedicated workers who keep the standard of performance at a high level, twenty having served for fifteen or more years.

REPORT OF EXAMINATIONS MADE JULY 1, 1958 THROUGH JUNE 30, 1960

	July 1, 1958-June 30, 1960	July 1, 1956 June 30, 1958
	Positive	Total
CHEMISTRY		
Chronic Disease		6,860
Occupational Health		308
Sanitary Engineering		14,497
Water Pollution		2,420
Miscellaneous Chemistry		62
		887
CYTOLOGY		
Cervical	772	57,375
Sputum	88	976
Breast	1	93
Miscellaneous Cytology	21	578
		38,168
ENVIRONMENTAL HEALTH		
Dust		1,281
Microbiological		409
Shellfish		6,423
Water	4,545	44,247
		27,344
INFECTIOUS DISEASES		
Bacterial		
Vincent's Angina	111	494
Undulant Fever	17	3,078
Diphtheria	46	1,032
Influenza		5
Hepatitis	389	2,869
Leptospiiral, Miscellaneous	2	421
Tuberculosis	1,094	41,673
Microscopic	28,865	
Animal Inoculation	431	
Culture	12,377	
Gonorrhea	1,043	5,930
Tularemia	18	2,595
Salmonella and Shigella	1,343	29,535
Typhoid	10,367	
Other Salmonella	11,217	
Shigella	7,951	
Staphylococcus	1,925	8,107
Microscopic	1,129	
Culture	2,656	
Coagulase	1,663	
Phage Typing	2,655	
Animal Inoculation	4	
Streptococcus	4,952	8,105
Microscopic	3,620	
Culture	2,572	
Anti Streptolysin O	1,973	

		July 1, 1958-June 30, 1960		July 1, 1956
		Positive	Total	June 30, 1958 Total
Syphilis			624,850	699,788
Qualitative Blood	590,744			
Quantitative Blood	29,742			
Spinal Fluid	2,976			
Total Protein	1,381			
Darkfield	7			
Miscellaneous Bacterial			8,046	1,347
Mycotic				
Candida		10	70	
Histoplasma		2	2	
Microsporium		2	2	
Trichophyton			3	
Yeast-like Fungi		1,535	1,581	
Miscellaneous Mycotic			268	
Parasitic				
Intestinal parasites			32,717	33,462
Amebae	471			
Tapeworm	5	5		
Roundworm	32,241	4,390		
Malaria		1	159	221
Toxoplasma		1	4	
Occult Blood		207	305	
Cysts		1,190	1,190	
Rickettsial				
Q Fever			176	46
Rickettsial Pox				64
Rocky Mountain Spotted Fever & Typhus		51	6,488	6,730
Rocky Mountain				
Spotted Fever	3,301			
Typhus	3,187			
Miscellaneous Rickettsial			17	
Viral				
Coxsackie		193	4,819	
Echo			5,747	
Encephalitis-Japanese B			18	
Encephalitis St. Louis		2	422	381
Equine Encephalomyelitis, Eastern		10	446	445
Equine Encephalomyelitis, Western		8	444	443
Herpes Simplex		2	6	
Infectious Mononucleosis		374	3,788	3,942
Influenza		407	783	416
Lymphocytic Choriomeningitis		16	422	415
Lymphogranuloma Venereum		8	35	144
Mumps		265	543	521
Poliomyelitis		1,161	4,349	
Psittacosis		13	260	742
Rabies		66	2,910	2,454
Microscopic	1,616			
Animal Inoculation	1,294			
Miscellaneous Viral			52	590
Special				
C-Reactive Protein		43	158	
Miscellaneous Special			36	
MSCCELLANEOUS EXAMINATIONS				
Cultures				10,175
Microscopic				2,304
Other				17,279
			940,499	1,005,106

	July 1, 1958 June 30, 1960	July 1, 1956 June 30, 1958
Diphtheria Toxoid (Alum Precipitated Injections)	1,497	2,932
Diphtheria Toxoid (Ramon Injections)	110	690
Combined Diphtheria Toxoid and Pertussis Vaccine Injections	561	3,610
Tetanus Toxoid Injections	160,600	57,400
Combined Diphtheria—Tetanus Toxoid Injections	20,360	16,820
Triple Antigen Injections	406,460	359,388
Schick Tests for Diphtheria Tests	11,920	15,770
Schick Control for Diphtheria Tests	0	4,520
Smallpox Vaccine		
Individual Tests	348,093	324,876
Typhoid Vaccine		
10 cc Vials	10,569	11,494
50 cc Vials	3,099	4,318
100 cc Vials	0	1
Rabies Treatments	402	523
Pertussis Vaccine		
Treatments	280	471
Autogenous Vaccine	58	60
Diphtheria Antitoxin		
10,000 Unit Packages	130	232
20,000 Unit Packages	515	604
Tetanus Antitoxin		
1,500 Unit Packages	5,319	5,971
20,000 Unit Packages	167	258
Dick Test for Scarlet Fever	1,250	1,365
Sheep Cells	9,750	1,080
Influenza Virus Vaccine—Monovalent Type Asian Strain—10 cc		586
Poliomyelitis Vaccine—9cc Vials (Sold)	38,580	
The Following Furnished to the Laboratory by The American Red Cross and Distributed Free of Charge		
Immune Globulin—No. cc	20,406	28,054
U.S.P.H.S. Funds through Division of Epidemiology		
Salk—Poliomyelitis Vaccine cc		270,886
Poliomyelitis Vaccine—9 cc Vials— Distributed under the State Provided Program (Emergency & Contingency Funds)	52,513	

BIOLOGICALS AND PRODUCTS

	July 1, 1958 June 30, 1960	July 1, 1956 June 30, 1958
Toxoid	\$ 28,136.82	\$ 21,068.09
Pertussis Vaccine	140.50	299.65
Autogenous Vaccine	263.50	285.00
Silver Nitrate	2,771.00	3,491.00
Antirabic Treatments	1,902.33	2,401.02
Diphtheria Antitoxin	272.55	316.50
Tetanus Antitoxin	3,239.18	3,634.74
Dick Test	82.50	82.50
Influenza Vaccine (Asian Strain)	40.95	2,328.20
Standard Solutions, Media & Reagents		5,000.00
Poliomyelitis Vaccine	8,741.05	
TOTAL	\$ 45,590.38	\$ 38,906.70
Water Tax	\$ 57,236.75	\$ 50,083.25
Specimen Outfits	28,318.99	27,718.81
Special Fees	904.35	969.20
Miscellaneous	1,361.94	458.82
Animals	1,399.70	1,188.30
Wool	168.68	84.09
Ford Sedan		221.01
Panel Body Truck		301.98
U.S.P.H.S. Influenza Diagnostic Contract	1,200.00	4,500.00
Batteries	5.20	
Equipment	11.52	
TOTAL	\$136,197.51	\$124,432.16
REFUNDS	154.25	96.91
NET TOTAL	\$136,043.26	\$124,335.25
FINANCIAL STATEMENT		
Total Expenditures	\$958,798.30	\$632,622.21
Total Receipts	136,043.26	124,335.25
Appropriation	\$822,755.04	\$508,286.96

THE DIVISION OF ORAL HYGIENE

July 1, 1958-June 30, 1960

On July 1, 1958, Dr. Ernest A. Branch, Director of the Division of Oral Hygiene since January 1, 1929, suffered a cerebral hemorrhage, resulting in paralysis and total invalidism until his death on December 3, 1958. Dr. Branch's passing was a great loss to our Division, to the State Board of Health, and to the State of North Carolina. Seldom does a State produce a native son so devoted to the cause of the health and welfare of its citizens as was Dr. Branch.

During Dr. Branch's illness the affairs of the Division were carried on with the Assistant Director, Dr. E. A. Pearson, Jr., in charge. Soon after the death of Dr. Branch, Dr. Pearson was made Director of the Division of Oral Hygiene.

Through three decades of devoted service to the Division of Oral Hygiene Dr. Branch planned, organized, and conducted a dental health program designed to improve the dental health of the children of our State. Those sound practices and policies which were developed by Dr. Branch shall serve as guideposts for future activities and as a challenge to build upon them an even better dental health program in North Carolina.

Tooth decay remains our number one physical defect. This, of course, affects the total population of our State. The number of persons presently affected by this condition presents a problem much greater than we can hope to conquer. Our hope lies in the future in that the very young and those yet unborn have a much better chance of avoiding the ravages of dental diseases than did our present adult population.

Today we have better preventive measures than heretofore. By far the most practical and effective measures are: the controlled fluoridation of municipal water supplies for the children of the urban population, and the topical application of a fluoride solution for the children of the rural population. Newer knowledges and concepts of personal oral hygiene practices and of diet in its relation to oral health also offer promise of better dental health for the younger generation.

In the field of operative dentistry prevention is being served by the development of improved techniques, materials, and equipment which make possible the restoration of decayed tooth structure and the saving of teeth for increasing numbers of patients. This is true in the areas of public health dentistry and of private practice.

In order for our population to profit from these measures to the fullest, they must understand, appreciate, and be stimulated to accept them. The task must be accomplished through the education of the masses. This remains the primary objective of the Division of Oral Hygiene, "prevention through education."

A program of prevention through education must begin with the very young. Therefore, the major activities of the Division are directed, as in the past, to the children of elementary school age. Objectives of the program are:

1. To help every school child appreciate the importance of a healthy mouth.
2. To help every school child appreciate the relationship of dental health to appearance.
3. To help all parents become aware of their children's dental defects and of the possible consequence of their remaining untreated.
4. To promote the observance of good dental health practices including personal care, professional care, and community utilization of preventive measures.
5. To stimulate all dentists to be active in their communities by rendering dental care and proper dental health education to their child patients.

To achieve the above objectives we must reach the child, the teacher, and the parent.

Our school dentists go into the classrooms to instruct the children in mouth health and to offer dental health teaching aids to the classroom teachers whose responsibility it is to instruct these children in dental health throughout the school year. The dentist inspects the mouths and teeth of all children to point up the need for dental care.

The school dentist renders dental care to as many of the underprivileged children as time and funds will permit. This is done for two purposes. The first reason our school dentist renders dental care to the underprivileged child is simply that the child could not receive this care from any other source. The second, and equally important, reason is for its educational value.

While the child is receiving dental care there are other children at the foot of the dental chair observing what is being done for the patient. All the while, the dentist is expending time and patience in explaining the conditions existing in the patient's mouth and showing them to the patient by the use of mirrors.

Teaching through demonstration, we are convinced, is a sound procedure. When we realize that 55% of the children of school age have never been in a dental office, the wonder is that more of the children are not beset with fears, apathy, and superstition regarding the dentist's services.

Those children found to be in need of dental care, whose parents are financially able to bear the cost, are referred to their family dentists. Cards, signed by the school dentists, are mailed to the parents calling their attention to the need of their children for immediate dental care.

Of course, the ultimate aim of the program is to educate all children to accept responsibility for their own dental health. However, until the child reaches the age and finds the means of providing for the cost of dental care, the parents must assume this obligation.

In addition to the program mentioned above, our Division provides strong supporting services. The dental health puppet show, which covers the State once every three years, carries a dental health message to thousands of children each year. Dental health education materials are developed, produced and distributed to teachers, local health departments, and dentists throughout the State. Staff dentists aid in the promotion of wide scale preventive procedures, notably, the fluoridation of municipal water supplies.

Sodium fluoride and stannous fluoride are supplied to dentists in private practice for topical application to the teeth of their child patients.

During the past two years staff members have conducted surveys in several towns to obtain base line data on the dental conditions prevailing before the towns began fluoridating their water supplies. These studies will be valuable in the future in evaluating the beneficial effects of fluoridation. This information can be used to promote the adoption of fluoridation in other towns.

A statistical summary follows showing the amounts and sources of funds expended and the services rendered by the Division for each year of the biennium, July 1, 1958, through June 30, 1960.

BUDGET AND PERFORMANCE STATISTICS

Sources of Funds Expended

	1959-1960	1958-1959
General Fund	\$118,220.84	*
Departmental	64,197.70	70,400.00
Federal	35,950.44	*
Total	\$218,368.98	\$216,090.79

Services

Average number of school dentists	15.2	15.6
Number counties receiving service	60	51
Number schools visited	628	553
Number of children—mouths inspected	124,803	97,155
Number of underprivileged children treated	36,513	30,867

Amount and Type of Treatment

Number amalgam fillings	15,073	29,947
Number cement fillings	6,412	9,342
Number silver nitrate treatments	47,144	35,539
Number teeth extracted	25,888	26,523
Number children—teeth cleaned	31,091	26,249
Number topical fluoride treatments	1,181	1,980
Number miscellaneous treatments	8,239	5,672

TOTAL OPERATIONS

Number six year molars extracted	5,773	5,373
Number six year molars filled	10,454	15,829
Average number fillings per child treated	0.58	1.24
Number children referred to family dentist	61,459	34,959
Number classroom lectures by dentists	3,600	2,559
Total attendance at lectures	132,291	98,367
Number performances of puppet show	394	439
Total attendance of puppet shows	122,877	144,126

*Breakdown between State and Federal funds not available when report was prepared.

Even though the Division could not meet all demands for service, it is felt that satisfactory progress was made in those counties in which dental health programs were conducted. Based on the realization that with the present number of staff dentists it is not possible to cover the State each year, efforts are being made to locate permanently as many of the dentists as possible in areas comprised of adjacent counties. This is being done with the plan of providing the service annually in these particular counties and of adding dentists and areas until the service can be furnished to all of the counties of the State with the exception of the six counties employing full-time dentists in their local health departments.

In the counties now being served, instead of trying to provide limited treatment of an emergency type for a great number of children, the dentists are concentrating their efforts on fewer children and, whenever possi-

ble, completing the necessary dental treatments for these children. This is a return to a former policy of completing the needed work for each child treated.

Attention is invited to the items of the statistical report showing the number of underprivileged children treated during each year and the numbers of amalgam and cement fillings per child treated. The comparison of the two years is, we believe, evidence enough to justify this change in policy. The dentists have more than doubled the number of permanent type restorations per child treated and have, thereby, reduced the number of teeth which will be lost in the future.

The present procedure makes it necessary for the dentists either to stay longer in each school or to limit the corrective service to fewer grades. It is our hope that in the counties receiving regular service the dentists will be able to reach all of the children eligible for the corrective service and have these children on a reasonably satisfactory maintenance care program within a period of from four to six years. We are convinced that this will improve the dental health and reduce the dental needs more rapidly and more effectively than can be accomplished by spreading dental care of emergency type over all the counties and through all the elementary grades.

In the past few years due to the unprecedented needs and demands for the service, we have been reluctant to call the staff dentists together for conferences and training for fear of using time which could be devoted to dental care for more children. To institute the above mentioned changes in policy and program procedure it seemed necessary to have several staff conferences. These were held at the Oral Hygiene Building. It is planned to continue the training program in an effort to keep our entire staff abreast of the rapid advancements being made in the development of new and better dental materials, methods, techniques, and equipment.

As funds have become available improvements have been made in the field equipment used by the dentists. The portable wooden dental chairs have been replaced with all metal adjustable chairs which provide for better positioning of the patients.

Recent findings regarding the transmission of viral diseases, serum hepatitis in particular, indicated the need for a change in our method of sterilization from that of boiling water. Each of the staff dentists now has a portable autoclave as part of his equipment. In keeping with the developments in the field of operative dentistry, where the use of high speed instruments is desirable as a means of improving both quality and quantity of work, we are hoping to replace the type of dental engine now in use with a high speed portable engine which will be adaptable to our work. We were fortunate in being able to obtain two such dental engines last year, and they are presently being field tested by two of our staff dentists.

Since World War II the greatest problem has been that of recruiting and retaining an adequate number of staff dentists to meet the needs and demands made upon the Division during these years. The turnover in personnel has been great, but some progress has been made.

In the 1954-1956 biennium the average number of staff dentists was twelve; for the biennium of 1956-1958 the average was fourteen; and for this biennium the average has been fifteen.

In 1959, as a result of comparative studies and evaluations of salary ranges as a major factor in recruiting and holding good men, recommendations were made to the State Personnel Council for increases in the salary schedules of both the Public Health Dentist I and the Public Health Dentist II classifications. The recommendations were approved. We believe that the higher salaries, along with the policy of giving the dentists more permanent locations, will help to overcome our recruitment problems.

It is anticipated that the average number of staff dentists for the first year of the coming biennium will be at least twenty with all of the twenty-three budgeted positions filled for the greater part of the year.

As stated, the use of fluorides in municipal water supplies is the most effective procedure known today for the reduction and control of the incidence of tooth decay. Many of the people of our State and Nation realize this and have made efforts to avail themselves of the beneficial effects of fluoridation; yet, a minority group has been able to create fear and doubt to such an extent that in many towns this procedure is not being utilized. Indications are that we are on the threshold, today, of the greatest progress in this program since fluoridation was introduced.

More and more people are coming to understand what fluoridation is and what it will do to improve dental health. It is hoped that we have passed through the period of public hearings, and that, now, the citizens have decided to get the facts for themselves and to convey their opinions to the governing bodies of their towns.

The majority of towns throughout the State are adding fluorides to their town water supplies as the result of action taken by their governing bodies. This, we are convinced, is a result of several years of an educational program throughout the State and of giving facts and figures concerning fluoridation. The director and entire staff of the Division have aided in this educational campaign when called upon.

The accompanying map shows the status of fluoridation in North Carolina. The estimated population of the thirty-one communities adding fluorides to their water supplies is 800,000, and the estimated population of the towns using naturally fluoridated water is 25,000. This represents more than one-half of our urban population.

During the last year of the biennium plans were made for the Division to participate in a State-wide research project, "The Natural History of Dental Diseases." This study will be in progress for at least three years. It is being conducted by the Department of Epidemiology of The University of North Carolina's School of Public Health and the Division of Oral Hygiene of the State Board of Health.

It is anticipated that the survey will provide data on the oral health of all age groups of our entire population. This is the first study of such magnitude ever undertaken in the field of dentistry. The study will provide valuable data to our Division for future program planning, and to the dental profession throughout the Nation for developing care and services to meet the dental needs more effectively.

REPORT OF THE COMMITTEE ON POSTMORTEM MEDICOLEGAL EXAMINATIONS

The Committee on Postmortem Medicolegal Examinations is charged with the general administration of the Medical Examiner System of the State of North Carolina. This new system became available to counties of the State January 1, 1956, having been authorized by Chapter 972, Public Laws of North Carolina, 1955. This system is designed to provide modern medical and scientific help to local officials in determining the cause of unattended deaths. Individual counties of the State may join or leave the system by resolution of the Board of County Commissioners.

Counties in the system recommend a qualified physician as county medical examiner as well as additional qualified physicians who may act as assistant medical examiners. These examiners examine the circumstances of each unattended death.

District pathologists are appointed by the Committee to perform autopsy examinations at the request of the county medical examiner. Toxicological analyses are provided by the toxicology laboratory at the University of North Carolina established at the request of the Committee.

The Committee has the following composition: Dr. J. W. R. Norton, Raleigh, Chairman; Dr. K. M. Brinkhous, Chapel Hill, Secretary; Dr. W. D. Forbus, Durham; Dr. Harry Carpenter, Winston-Salem, who replaced Dr. S. Foushee in 1959; Mr. Holt McPherson, High Point; Mr. Walter Anderson, State Bureau of Investigation, Raleigh; and Mr. C. D. Barham, Attorney General's Office, Raleigh. Dr. W. W. Forrest, Greensboro, serves as a consultant to the Committee. Dr. J. H. Hamilton, Raleigh, also served as a consultant until his retirement in 1960. Dr. R. H. Wagner serves as toxicologist.

To date, five counties of the State have been in the system: Pope, Union, Wilkes, Cumberland, and Guilford. At the present time Guilford County remains active. There is current interest in other counties, particularly Cleveland and Forsyth, in joining the system.

The system has been particularly effective in Guilford County; 289 deaths were examined in 1958, 395 in 1959, with 45 autopsies in the latter year. In 1959, in Guilford County, 24 cases were homicides, 23 suicides, 62 accidents, 28 crib deaths, and 258 natural deaths. The system has been highly effective, bringing to light the homicides, as well as protecting innocent people suspected in certain cases of natural death.

Toxicological analyses are an important part of this system, and are provided without charge to the counties. Initially, these analyses were made on a case basis at Duke University. Since 1958, they have been made at the Toxicology Laboratory at Chapel Hill. This laboratory was set up especially for this purpose, both as to equipment and personnel. Painstaking work is needed in the development of each analytic procedure to be used.

The laboratory is now prepared to carry out the following analyses:

(1) *Quantitative and Qualitative Tests*: Ethyl alcohol; Methyl alcohol; Isopropyl alcohol; Acetone; Carbon monoxide; Acetaldehyde; Salicylates;

Cyanide; Barbiturates; Nicotine; Methemoglobin; Pyribenzamine; Strychnine; Lead; Arsenic; Quinine; and Fluorides.

(2) *Qualitative Tests Only*: Heavy metals (Mercury, Antimony); Alkaloids; Barbiturates; Morphine; Demerol; Phenols; Ethylene glycol; and Phosphorus.

Analyses needed or in process of development are: Parathion (ChE inhibitors); Quantitative analyses for other heavy metals; Blood Lead; Glucosides; and Toxins (Bacteriological Assays).

In 1958-59, 58 cases were examined with 74 analyses. In 1959-60, 125 cases were examined with 161 analyses. Each case appears to be different, being an individual research problem.

The chief needs of the Medical Examiner System are related to methods making it more effective and generally available throughout the State. These needs include:

(1) Elimination of the coroner's office as a mandatory Constitutional office, and

(2) Development of a state-wide system with a full-time chief medical examiner.

The aims of the Committee are to carry on the program as presently organized in a sound manner and to work for the gradual strengthening of the system. It is believed that a firm foundation is being built for a more widely available and accepted system.

J. W. R. Norton, Chairman
K. M. Brinkhous, Secretary
Committee on Postmortem Medicolegal
Examinations

PUBLIC HEALTH CHRONOLOGY—1952—1959*

1952—On June 1, 1952, the Personnel Office established specifications for several new programs, including Accident Prevention, Stream Sanitation and Communicable Disease Control. Dr. Charles M. Cameron, Jr., upon completing one year of post-graduate work at the University of North Carolina, School of Public Health, became Chief of the Accident Prevention Section. Dr. Hamilton made a progress report on the Medical-Public Health Library. He also reported on reclassification of health department employees by the Personnel Council.

1953—On May 7 the State Health Officer was given the Lasker Award by the Planned Parenthood Association of America. A similar award was previously awarded to Dr. Cooper. During the year, 43 clinicians attended the refresher course in Maternal and Child Health at Bowman-Gray; 25 hospital nurses and 12 public health nurses were given courses three and four weeks at Duke. On July 1, 1953 Dr. C. B. Kendall became Chief of the Crippled Children's Section succeeding Dr. Myron C. Rudolph who had died. During the year an assistant to the State Consultant on Physical Therapy was added for four months during the polio season with support from the National Foundation for Infantile Paralysis. On April 1, the position of Chief of the Communicable Disease Control Section was filled. The year also marked intensification of work by the Veterinary Public Health Section, including a campaign against rabies, anthrax, psittacosis and leptospirosis. The mass survey by the Tuberculosis Control Section was carried forward with great vigor. The Venereal Disease Control program showed favorable progress during the year. Activities of the State Laboratory of Hygiene continued to expand and cancer cytology services were somewhat increased. In spite of the marked reduction in Federal funds for county health work the program was kept on an even keel by increases in county funds under the directorship of Dr. C. C. Applewhite. The Public Health Education Section continued its activities in schools, health departments and other organizations. Work of the Mental Health Section continued to emphasize services through local health departments. During the year, rheumatic and heart disease programs were initiated at Bowman-Gray and at Memorial Hospital in Chapel Hill. A plan for speech and hearing therapy was developed during the year. Two new cancer centers were opened—a detection center at Lincoln Hospital in Durham and a detection and diagnostic center in Rutherfordton. The Heart Section gave a three-day refresher course to thirty general practitioners at Bowman-Gray.

1954—Following the 1954 Conjoint Session of the State Board of Health and the State Medical Society the health department was moved from its old building to its new million dollar headquarters on Caswell Square. Work of sending out public health literature and information continued to grow during the year. On June 1, the Medical-Public Health Library was opened in the Laboratory building. John M. Gibson, formerly with the Alabama State Health Department, is in charge. Local appropriations for public health work continued to increase, giving evidence of the growing

interest in public health activities throughout the State. During the year, Dr. Robert E. Coker, Jr., resigned as Assistant Director of the Local Health Division and was replaced by Dr. B. M. Drake. Dr. John A. Googins, commissioned officer of the United States Public Health Service, was assigned to the Division for a year's experience, as of July 1. The year 1954 also saw progress and new ventures in the mental health section activities. The first state-wide conference for mental health clinic personnel was held in Raleigh early in the year and in the Fall a second such conference also was held in the Capital City. During the year, medical consultant services in Venereal Disease Control was extended on an increased basis to local health departments, private physicians, hospitals and medical officers at the several military installations in North Carolina. The Public Health Statistics Section continued to expand its scope of usefulness. During the year the Tuberculosis Control Section continued its expanded activities and mass x-ray surveys were conducted in 22 communities. Two hundred fifty-one thousand seven hundred sixty-two persons were thus tested which was an increase of 1,210 over the preceding year. In 1954, the activities of the Veterinary Public Health Section continued promotion of an adequate rabies control program. Boards of County Commissioners in 20 counties appointed dog wardens and constructed sanitary dog pounds. The number of school children inspected by public health dentists during 1954 numbered 106,780 and 40,832 underprivileged children received dental correction. The Wake County Detection Center began operations in Rex Hospital on August 5.

1955—During the year 1955, the work of the Department continued to move steadily forward. During the year the North Carolina Hospital Association and the State Board of Health continued to sponsor institutes for food service managers in small hospitals. The University of North Carolina Institute had an attendance of 42, showing keen interest in this undertaking. A new public health nutrition internship was started in October with a graduate in Home Economics from Woman's College a major in nutrition as the first intern—Miss Mary Lee Brown. The Heart Section gave its first refresher course at Bowman-Gray in 1952 with 28 general practitioners. In June, 1955 the number had increased to 34 general practitioners.

1956—During the year Central Files received and filed 209,462 records and made over 36,000 searches for material. The Medical-Public Health Library added 229 books to the Library, reported 3,704 visits and loans of 1,682 books. Federal money appropriated for the purchase of poliomyelitis vaccine made it possible for the State Board of Health to distribute enough for 1,428,000 inoculations. In the field of Maternal and Child Health there were 4,609 clinic sessions which rendered assistance to 34,000 maternity cases and 53,000 infants and pre-school children. The year 1956 was the 40th year of service which the State Laboratory of Hygiene has rendered to the people of North Carolina.

1957—1957 was marked by a bond burning of the last of \$160,000 self-liquidating bonds which were retired on July 1. The Conjoint Session of the State Board of Health and the State Medical Society was held in

Asheville. Much progress was shown in the work of the Division of Epidemiology, especially in the reduction of reported cases of infectious syphilis during the past ten-year period was from 7,313 in 1948 to 5,440 in 1957. The polio vaccination program has resulted in our having only 229 cases in 1957, the lowest since 1949 when the same number was reported following an epidemic year in 1948 with 2,516 cases reported. During 1957 the Public Health Statistics Section rendered services to several committees of the Medical Society of the State of North Carolina in personnel, tabulating, materials, and supplies.

1958—The early months of 1958 were marked by several events of especial significance to public health. On May 7 Dr. G. Grady Dixon of Ayden died in Hickory on his way home from Asheville after that morning presiding over a Board session and the 1958 Conjoint Session of the State Board of Health and the State Medical Society. Ben Eaton, Jr., filled a new position in April when he became Director of Administrative Services. Dr. R. D. Higgins was appointed in February to succeed Dr. C. C. Applewhite as Director of the Division of Local Health. Dr. Applewhite retired to live in Jackson, Mississippi.

1959—The 1959 General Assembly enacted legislation making vaccination for poliomyelitis compulsory for young children from the age of two months to six years prior to entering school. Dr. Ernest A. Branch died Dec. 3, 1958 after making major contributions to dental health in the State and heading the dental health program of North Carolina for 29 years. Dr. Earl W. Brian of Raleigh was sworn in as a member of the State Board by election by the Medical Society of the State of North Carolina, filling the vacancy created by the death of Dr. G. Grady Dixon. The State Board voted to participate in an allocation formula for Local Health Departments in order to provide incentive for joining the Local Government Retirement System not to exceed \$1,000 per year for any county. Dr. A. H. Elliot, director of the Personal Health Division retired June 30, 1959. Dr. D. Frank Milam returned to the State Board as Chief of the Cancer-Heart Section. Dr. Robert D. Coler, Chief of the Occupational Health Section, resigned and Dr. William L. Wilson of Texas was appointed. Ben Eaton, Director of Administrative Services, requested a two-year leave of absence for overseas duty effective Aug. 1, 1959. By appointment of the Governor, Jasper C. Jackson, Ph.G., of Lumberton and Ben W. Dawsey, D.V.M., of Gastonia were sworn in as members of the State Board on Sept. 1, 1959. William H. Richardson, Publicity Specialist, retired on Sept. 30, 1959, and Edwin S. Preston, LL.D., was appointed as Public Relations Officer effective Dec. 1, 1959. Charles L. Harper was appointed Director of Administrative Services, effective Jan. 1, 1960. Dr. William M. Peck, Chief of Chronic Diseases-Radiation, resigned to accept a position as director of public health on Guam. Dr. H. H. Hamilton retired on April 30, 1960, as Director of the Laboratory of Hygiene, Editor of *The Health Bulletin*, and Assistant State Health Director. He had served in public health in North Carolina for over 40 years.

A Chronological report year by year from 1877 to 1952 is contained in the 34th Biennial Report covering the period, July 1, 1950-June 30, 1952.

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